

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: P830604

Luminaire Tested: **OHBL-60HE-A-UNV-L935-CD**

Issue Date: 5/3/2024



Test Information

Test Method: LM-79-08
Report Number: P830604
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-60HE-A-UNV-L935-CD
Description: 60000 LUMEN OHBL HE LED LUMINAIRE WITH 90CRI, 3500K LEDS AND AISLE LENS
Light Source: -
Ballast/Driver: -

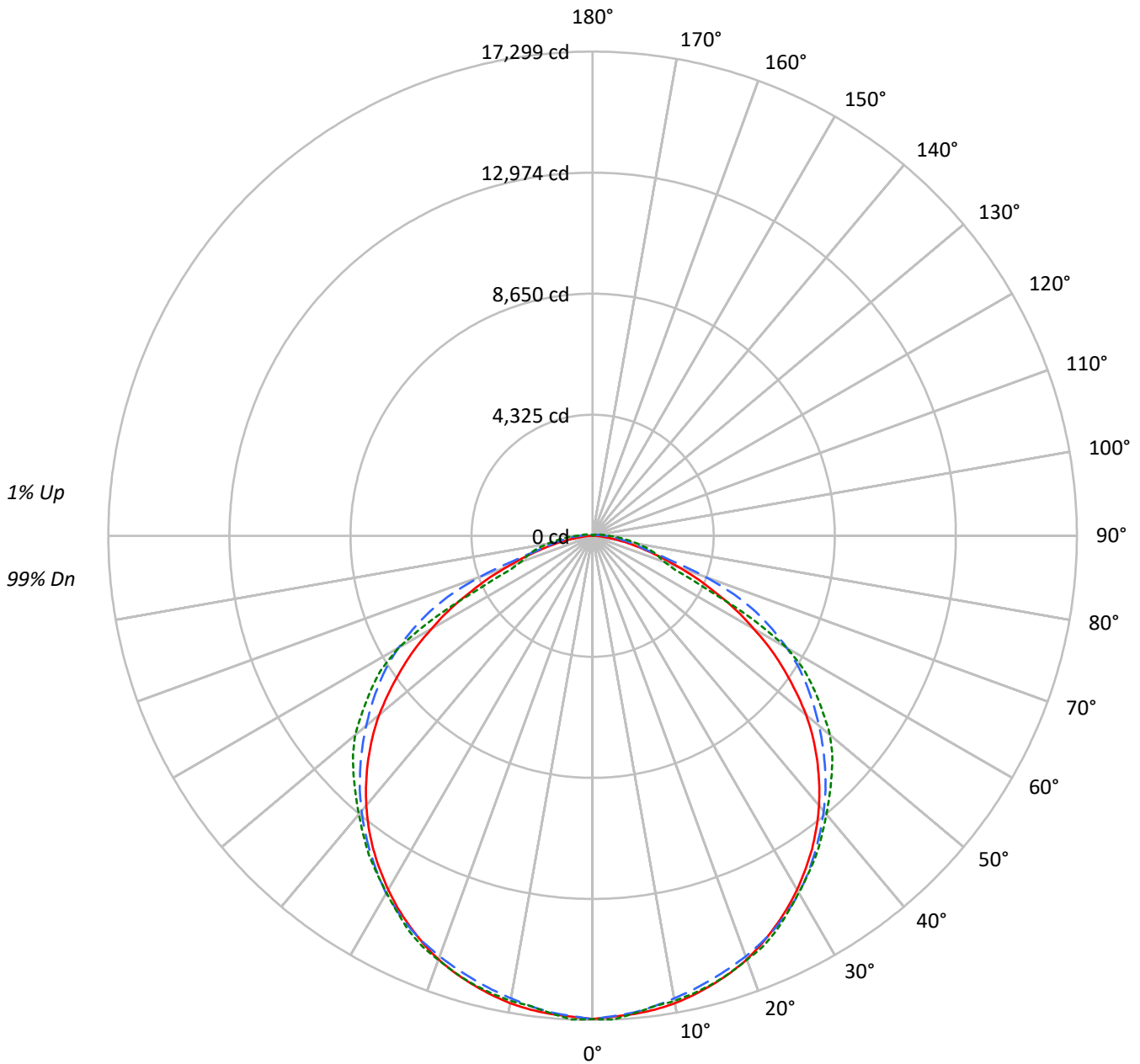
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 48796.1 lumens
Efficiency: N/A
Efficacy: 144.4 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): 338
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: P830604
CATALOG NUMBER: OHBL-60HE-A-UNV-L935-CD

Luminous Intensity Polar Plot





TEST NUMBER: P830604

CATALOG NUMBER: OHBL-60HE-A-UNV-L935-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° | 27303 | 27303 | 27303 |
| 5° | 27124 | 26906 | 26963 |
| 10° | 27025 | 26499 | 26663 |
| 15° | 26853 | 26194 | 26485 |
| 20° | 26682 | 26002 | 26250 |
| 25° | 26360 | 25808 | 26018 |
| 30° | 26010 | 25504 | 25526 |
| 35° | 25591 | 25020 | 25254 |
| 40° | 25047 | 24520 | 24885 |
| 45° | 24293 | 23943 | 24721 |
| 50° | 23270 | 23284 | 24525 |
| 55° | 21646 | 22637 | 23610 |
| 60° | 19519 | 21690 | 21828 |
| 65° | 16744 | 19931 | 13833 |
| 70° | 13487 | 15559 | 10029 |
| 75° | 10112 | 9236 | 10179 |
| 80° | 7038 | 7680 | 9719 |
| 85° | 4006 | 7037 | 9109 |



TEST NUMBER: P830604

CATALOG NUMBER: OHBL-60HE-A-UNV-L935-CD

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 1627.8 | 3.3 |
| 10°-20° | 4667.9 | 9.6 |
| 20°-30° | 7129.3 | 14.6 |
| 30°-40° | 8650.3 | 17.7 |
| 40°-50° | 9066.4 | 18.6 |
| 50°-60° | 8215.5 | 16.8 |
| 60°-70° | 5508.2 | 11.3 |
| 70°-80° | 2473.4 | 5.1 |
| 80°-90° | 897.6 | 1.8 |
| 90°-100° | 270.2 | 0.6 |
| 100°-110° | 127.5 | 0.3 |
| 110°-120° | 63.9 | 0.1 |
| 120°-130° | 35.2 | 0.1 |
| 130°-140° | 24.2 | 0.0 |
| 140°-150° | 16.3 | 0.0 |
| 150°-160° | 12.1 | 0.0 |
| 160°-170° | 7.8 | 0.0 |
| 170°-180° | 2.5 | 0.0 |
| 0°-30° | 13425.1 | 27.5 |
| 0°-40° | 22075.4 | 45.2 |
| 0°-60° | 39357.2 | 80.7 |
| 0°-90° | 48236.3 | 98.9 |
| 90°-120° | 461.5 | 0.9 |
| 90°-150° | 537.3 | 1.1 |
| 90°-180° | 560.0 | 1.1 |
| 0°-180° | 48796.1 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|-------|-------|-------|-------|-------|------|
| 0° | 17264 | 17264 | 17264 | 17264 | 17264 | |
| 5° | 17152 | 17212 | 17092 | 17144 | 17122 | ### |
| 15° | 16595 | 16530 | 16413 | 16558 | 16578 | 4685 |
| 25° | 15417 | 15349 | 15457 | 15599 | 15554 | 7106 |
| 35° | 13664 | 13697 | 13837 | 13984 | 13929 | 8541 |
| 45° | 11340 | 11525 | 11740 | 12039 | 12077 | 8736 |
| 55° | 8345 | 8747 | 9344 | 9718 | 9695 | 7449 |
| 65° | 4898 | 5664 | 6430 | 5427 | 4431 | 4880 |
| 75° | 1927 | 2796 | 2057 | 2104 | 2242 | 2106 |
| 85° | 332 | 636 | 816 | 986 | 1033 | 405 |
| 90° | 2 | 212 | 422 | 529 | 554 | 20 |
| 95° | 2 | 132 | 290 | 352 | 362 | 3 |
| 105° | 10 | 57 | 142 | 172 | 180 | 12 |
| 115° | 20 | 30 | 72 | 92 | 97 | 19 |
| 125° | 18 | 20 | 45 | 52 | 55 | 17 |
| 135° | 22 | 25 | 28 | 40 | 42 | 18 |
| 145° | 22 | 25 | 25 | 28 | 30 | 15 |
| 155° | 25 | 28 | 28 | 28 | 25 | 12 |
| 165° | 28 | 28 | 28 | 28 | 28 | 8 |
| 175° | 28 | 28 | 25 | 22 | 22 | 3 |
| 180° | 25 | 25 | 25 | 25 | 25 | |



TEST NUMBER: P830604

CATALOG NUMBER: OHBL-60HE-A-UNV-L935-CD

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|---------|---------|---------|---------|---------|
| 0° | 17264.1 | 17264.1 | 17264.1 | 17264.1 | 17264.1 |
| 2.5° | 17194.2 | 17266.6 | 17176.7 | 17274.1 | 17299.0 |
| 5° | 17151.7 | 17211.6 | 17091.8 | 17144.2 | 17121.8 |
| 7.5° | 17074.4 | 17094.3 | 16952.0 | 16994.5 | 16949.5 |
| 10° | 16959.5 | 16949.5 | 16782.3 | 16864.7 | 16874.7 |
| 12.5° | 16789.8 | 16759.8 | 16610.0 | 16734.9 | 16737.4 |
| 15° | 16595.1 | 16530.2 | 16412.8 | 16557.6 | 16577.6 |
| 17.5° | 16370.4 | 16285.5 | 16208.2 | 16395.4 | 16365.4 |
| 20° | 16108.3 | 16008.5 | 15993.5 | 16198.2 | 16123.3 |
| 22.5° | 15783.8 | 15706.4 | 15741.4 | 15936.1 | 15888.6 |
| 25° | 15416.8 | 15349.4 | 15456.8 | 15599.1 | 15554.1 |
| 27.5° | 15029.9 | 14990.0 | 15112.3 | 15222.1 | 15134.8 |
| 30° | 14605.6 | 14583.1 | 14745.3 | 14835.2 | 14725.4 |
| 32.5° | 14143.8 | 14151.2 | 14306.0 | 14428.3 | 14326.0 |
| 35° | 13664.5 | 13696.9 | 13836.7 | 13984.0 | 13929.1 |
| 37.5° | 13137.8 | 13210.2 | 13349.9 | 13517.2 | 13459.8 |
| 40° | 12581.1 | 12685.9 | 12840.7 | 13042.9 | 12990.5 |
| 42.5° | 11979.5 | 12111.8 | 12311.5 | 12536.2 | 12531.2 |
| 45° | 11340.5 | 11525.2 | 11739.9 | 12039.4 | 12076.9 |
| 47.5° | 10676.5 | 10883.7 | 11155.7 | 11555.1 | 11612.6 |
| 50° | 9955.0 | 10214.7 | 10554.1 | 11033.4 | 11068.4 |
| 52.5° | 9151.3 | 9505.7 | 9955.0 | 10414.4 | 10371.9 |
| 55° | 8345.0 | 8746.9 | 9343.5 | 9717.9 | 9695.4 |
| 57.5° | 7541.2 | 7993.0 | 8716.9 | 8984.0 | 8981.5 |
| 60° | 6642.5 | 7214.2 | 8005.5 | 8207.7 | 8008.0 |
| 62.5° | 5811.3 | 6425.3 | 7246.6 | 7099.3 | 6415.4 |
| 65° | 4897.6 | 5664.0 | 6430.3 | 5426.8 | 4430.8 |
| 67.5° | 4086.4 | 4885.2 | 5461.8 | 3716.9 | 3182.7 |
| 70° | 3270.1 | 4151.3 | 4258.6 | 2758.4 | 2720.9 |
| 72.5° | 2546.2 | 3484.8 | 2938.1 | 2361.5 | 2481.3 |
| 75° | 1927.1 | 2795.8 | 2056.9 | 2104.3 | 2241.6 |
| 77.5° | 1405.4 | 2146.8 | 1600.1 | 1844.7 | 1957.1 |
| 80° | 966.0 | 1520.2 | 1305.5 | 1550.2 | 1627.6 |
| 82.5° | 606.6 | 1003.5 | 1045.9 | 1248.1 | 1328.0 |
| 85° | 332.0 | 636.5 | 816.3 | 986.0 | 1033.4 |
| 87.5° | 137.3 | 384.4 | 624.1 | 761.4 | 801.3 |
| 90° | 2.5 | 212.2 | 421.9 | 529.2 | 554.2 |
| 92.5° | 2.5 | 162.3 | 344.5 | 426.9 | 444.3 |
| 95° | 2.5 | 132.3 | 289.6 | 352.0 | 362.0 |
| 97.5° | 5.0 | 104.8 | 242.1 | 292.1 | 302.0 |
| 100° | 7.5 | 87.4 | 202.2 | 244.6 | 252.1 |
| 102.5° | 10.0 | 69.9 | 169.7 | 204.7 | 212.2 |
| 105° | 10.0 | 57.4 | 142.3 | 172.2 | 179.7 |



TEST NUMBER: P830604

CATALOG NUMBER: OHBL-60HE-A-UNV-L935-CD

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|------|-------|------|-------|-------|
| 112.5° | 17.5 | 34.9 | 84.9 | 107.3 | 112.3 |
| 115° | 20.0 | 30.0 | 72.4 | 92.4 | 97.4 |
| 117.5° | 20.0 | 25.0 | 62.4 | 77.4 | 82.4 |
| 120° | 20.0 | 22.5 | 54.9 | 67.4 | 69.9 |
| 122.5° | 20.0 | 20.0 | 47.4 | 59.9 | 62.4 |
| 125° | 17.5 | 20.0 | 44.9 | 52.4 | 54.9 |
| 127.5° | 20.0 | 20.0 | 39.9 | 47.4 | 49.9 |
| 130° | 20.0 | 22.5 | 34.9 | 44.9 | 44.9 |
| 132.5° | 22.5 | 25.0 | 32.5 | 42.4 | 42.4 |
| 135° | 22.5 | 25.0 | 27.5 | 39.9 | 42.4 |
| 137.5° | 25.0 | 25.0 | 25.0 | 37.4 | 39.9 |
| 140° | 25.0 | 25.0 | 22.5 | 32.5 | 34.9 |
| 142.5° | 22.5 | 25.0 | 22.5 | 30.0 | 32.5 |
| 145° | 22.5 | 25.0 | 25.0 | 27.5 | 30.0 |
| 147.5° | 25.0 | 25.0 | 25.0 | 25.0 | 27.5 |
| 150° | 25.0 | 25.0 | 25.0 | 25.0 | 25.0 |
| 152.5° | 25.0 | 25.0 | 25.0 | 25.0 | 25.0 |
| 155° | 25.0 | 27.5 | 27.5 | 27.5 | 25.0 |
| 157.5° | 25.0 | 27.5 | 27.5 | 27.5 | 27.5 |
| 160° | 25.0 | 27.5 | 27.5 | 27.5 | 27.5 |
| 162.5° | 27.5 | 27.5 | 27.5 | 27.5 | 27.5 |
| 165° | 27.5 | 27.5 | 27.5 | 27.5 | 27.5 |
| 167.5° | 27.5 | 30.0 | 27.5 | 27.5 | 27.5 |
| 170° | 27.5 | 27.5 | 27.5 | 25.0 | 25.0 |
| 172.5° | 27.5 | 27.5 | 27.5 | 25.0 | 25.0 |
| 175° | 27.5 | 27.5 | 25.0 | 22.5 | 22.5 |
| 177.5° | 30.0 | 27.5 | 25.0 | 22.5 | 20.0 |
| 180° | 25.0 | 25.0 | 25.0 | 25.0 | 25.0 |



Report Generated By 670246072 / DESKTOP-50001EG





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







| | | | | | |
|--------|------|------|-------|-------|-------|
| 107.5° | 12.5 | 47.4 | 122.3 | 147.3 | 152.3 |
| 110° | 15.0 | 39.9 | 102.3 | 124.8 | 129.8 |



(END OF REPORT)