

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: P826399

Luminaire Tested: **OHB-24HE-W-UNV-L830-CD-UPL24**

Issue Date: 5/3/2024



Test Information

Test Method: LM-79-08
Report Number: P826399
REPORT IS A COMBINATION OF REPORTS P826208 AND G3-2310-221-6
Test Lab: INNOVATION CENTER
Issue Date: 5/3/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: OHB-24HE-W-UNV-L830-CD-UPL24
Description:
Light Source: -
Ballast/Driver: -

Summary

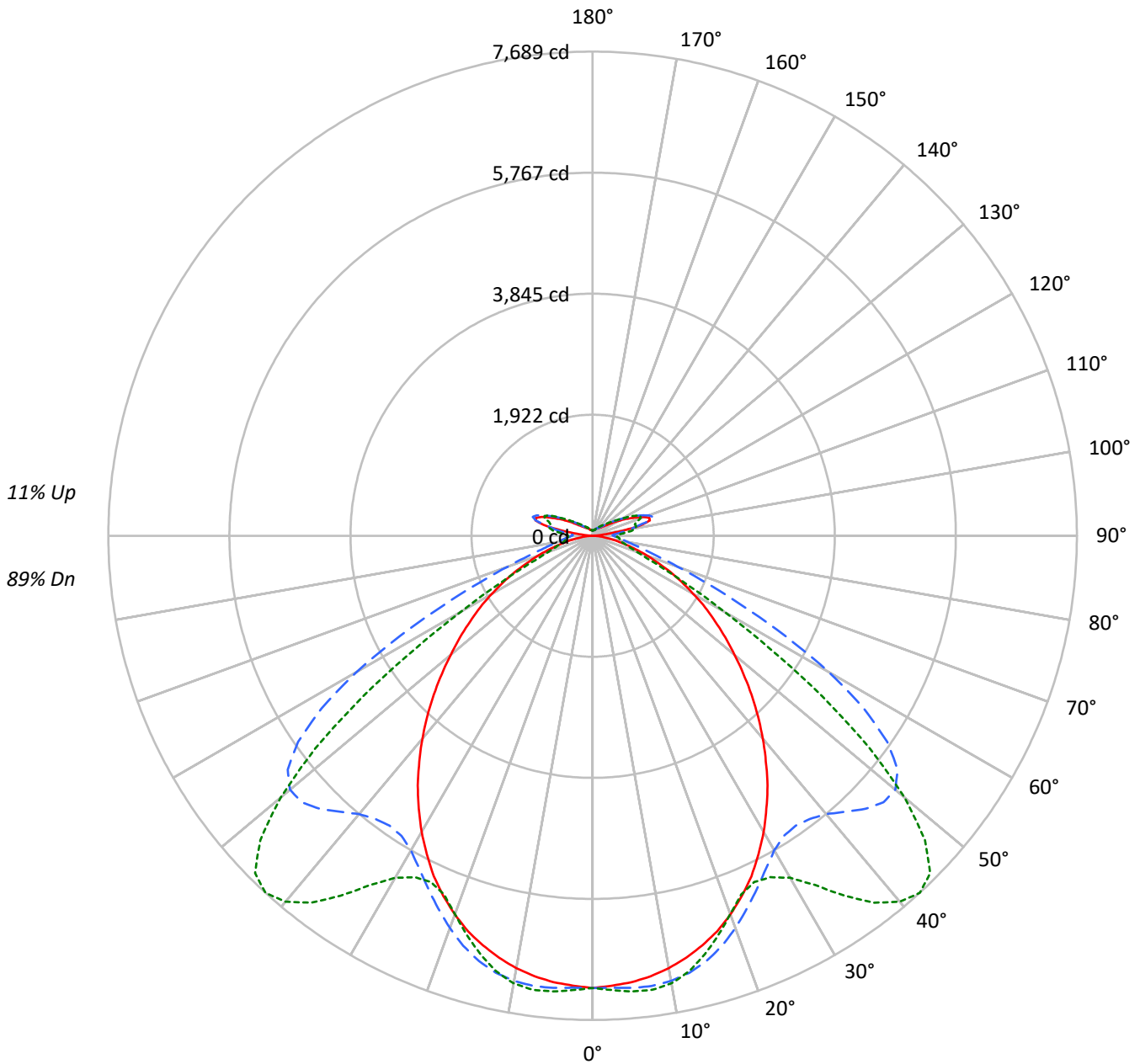
Lumens per Lamp: N/A
Luminaire Lumens: 23756.4 lumens
Efficiency: N/A
Efficacy: 161.2 lumens/watt
Spacing Criteria (0/90/45): 1.14 / 1.58 / 1.62
Luminous Opening: Rectangular w/ Sides (W: 1.93' x L: 1.8' x H: 0.17')
CIE Type: Semi-Direct

Input Watts (W): 147.4
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: P826399

CATALOG NUMBER: OHB-24HE-W-UNV-L830-CD-UPL24

Luminous Intensity Polar Plot





TEST NUMBER: P826399

CATALOG NUMBER: OHB-24HE-W-UNV-L830-CD-UPL24

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 | 116 | 116 | 116 | 116 | 112 | 112 | 112 | 112 | 105 | 105 | 105 | 98 | 98 | 98 | 92 | 92 | 92 | 89 | | | | | | | | | | | | | | | | | | | |
| 1 | 107 | 102 | 98 | 94 | 103 | 99 | 95 | 92 | 92 | 89 | 87 | 87 | 84 | 82 | 81 | 79 | 78 | 75 | | | | | | | | | | | | | | | | | | | |
| 2 | 97 | 89 | 83 | 77 | 94 | 86 | 81 | 76 | 81 | 76 | 72 | 76 | 72 | 69 | 72 | 68 | 66 | 63 | | | | | | | | | | | | | | | | | | | |
| 3 | 89 | 79 | 71 | 64 | 85 | 76 | 69 | 63 | 72 | 66 | 61 | 67 | 62 | 58 | 63 | 59 | 56 | 53 | | | | | | | | | | | | | | | | | | | |
| 4 | 81 | 69 | 61 | 54 | 78 | 67 | 60 | 53 | 63 | 57 | 52 | 60 | 54 | 50 | 56 | 52 | 48 | 45 | | | | | | | | | | | | | | | | | | | |
| 5 | 74 | 62 | 53 | 47 | 72 | 60 | 52 | 46 | 57 | 50 | 44 | 54 | 48 | 43 | 51 | 46 | 41 | 39 | | | | | | | | | | | | | | | | | | | |
| 6 | 69 | 56 | 47 | 40 | 66 | 54 | 46 | 40 | 51 | 44 | 39 | 48 | 42 | 37 | 46 | 40 | 36 | 34 | | | | | | | | | | | | | | | | | | | |
| 7 | 63 | 50 | 42 | 36 | 61 | 49 | 41 | 35 | 46 | 39 | 34 | 44 | 38 | 33 | 42 | 36 | 32 | 30 | | | | | | | | | | | | | | | | | | | |
| 8 | 59 | 46 | 37 | 31 | 57 | 44 | 36 | 31 | 42 | 35 | 30 | 40 | 34 | 29 | 38 | 33 | 28 | 26 | | | | | | | | | | | | | | | | | | | |
| 9 | 55 | 42 | 34 | 28 | 53 | 41 | 33 | 28 | 39 | 32 | 27 | 37 | 31 | 26 | 35 | 30 | 26 | 24 | | | | | | | | | | | | | | | | | | | |
| 10 | 51 | 38 | 30 | 25 | 49 | 37 | 30 | 25 | 36 | 29 | 24 | 34 | 28 | 24 | 32 | 27 | 23 | 21 | | | | | | | | | | | | | | | | | | | |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|-------|-------|-------|
| 0° | 22214 | 22214 | 22214 |
| 5° | 21915 | 22136 | 22385 |
| 10° | 21548 | 22056 | 22330 |
| 15° | 21037 | 21644 | 21533 |
| 20° | 20373 | 20854 | 20399 |
| 25° | 19517 | 19910 | 19908 |
| 30° | 18413 | 19197 | 21329 |
| 35° | 17170 | 19501 | 24841 |
| 40° | 15750 | 21059 | 28565 |
| 45° | 14274 | 23810 | 30520 |
| 50° | 12745 | 26230 | 28202 |
| 55° | 11306 | 26082 | 21367 |
| 60° | 9847 | 21946 | 12927 |
| 65° | 8317 | 15050 | 7724 |
| 70° | 6613 | 9641 | 5472 |
| 75° | 4872 | 6818 | 4931 |
| 80° | 3311 | 5867 | 5301 |
| 85° | 2003 | 6207 | 7561 |



TEST NUMBER: P826399

CATALOG NUMBER: OHB-24HE-W-UNV-L830-CD-UPL24

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 686.3 | 2.9 |
| 10°-20° | 1943.5 | 8.2 |
| 20°-30° | 2843.9 | 12.0 |
| 30°-40° | 3693.4 | 15.5 |
| 40°-50° | 4510.1 | 19.0 |
| 50°-60° | 3971.9 | 16.7 |
| 60°-70° | 2069.8 | 8.7 |
| 70°-80° | 887.6 | 3.7 |
| 80°-90° | 432.0 | 1.8 |
| 90°-100° | 416.0 | 1.8 |
| 100°-110° | 873.5 | 3.7 |
| 110°-120° | 716.1 | 3.0 |
| 120°-130° | 348.3 | 1.5 |
| 130°-140° | 174.3 | 0.7 |
| 140°-150° | 99.1 | 0.4 |
| 150°-160° | 55.5 | 0.2 |
| 160°-170° | 27.0 | 0.1 |
| 170°-180° | 8.2 | 0.0 |
| 0°-30° | 5473.7 | 23.0 |
| 0°-40° | 9167.1 | 38.6 |
| 0°-60° | 17649.2 | 74.3 |
| 0°-90° | 21038.5 | 88.6 |
| 90°-120° | 2005.6 | 8.4 |
| 90°-150° | 2627.2 | 11.1 |
| 90°-180° | 2718.0 | 11.4 |
| 0°-180° | 23756.4 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|------|-------|------|-------|------|------|
| 0° | 7182 | 7182 | 7182 | 7182 | 7182 | |
| 5° | 7115 | 7170 | 7208 | 7272 | 7264 | 675 |
| 15° | 6733 | 6922 | 6988 | 6936 | 6880 | 1896 |
| 25° | 5966 | 6285 | 6178 | 6062 | 6068 | 2738 |
| 35° | 4842 | 5354 | 5622 | 6556 | 6976 | 3018 |
| 45° | 3565 | 4486 | 6131 | 7424 | 7579 | 2749 |
| 55° | 2374 | 3930 | 5710 | 5006 | 4450 | 2131 |
| 65° | 1362 | 2722 | 2614 | 1453 | 1250 | 1348 |
| 75° | 549 | 1274 | 840 | 575 | 545 | 598 |
| 85° | 116 | 454 | 428 | 418 | 423 | 130 |
| 90° | 6 | 196 | 326 | 380 | 394 | 11 |
| 95° | 52 | 199 | 385 | 476 | 511 | 156 |
| 105° | 940 | 977 | 931 | 734 | 692 | 892 |
| 115° | 653 | 681 | 740 | 759 | 756 | 659 |
| 125° | 325 | 347 | 390 | 405 | 404 | 304 |
| 135° | 195 | 199 | 221 | 240 | 243 | 154 |
| 145° | 147 | 148 | 152 | 162 | 167 | 93 |
| 155° | 120 | 122 | 121 | 122 | 122 | 54 |
| 165° | 93 | 94 | 95 | 95 | 95 | 27 |
| 175° | 84 | 85 | 85 | 86 | 86 | 8 |
| 180° | 84 | 84 | 84 | 84 | 84 | |



TEST NUMBER: P826399

CATALOG NUMBER: OHB-24HE-W-UNV-L830-CD-UPL24

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|--------|--------|--------|--------|--------|
| 0° | 7182.0 | 7182.0 | 7182.0 | 7182.0 | 7182.0 |
| 2.5° | 7151.0 | 7182.0 | 7183.5 | 7227.0 | 7222.3 |
| 5° | 7115.4 | 7169.7 | 7208.4 | 7271.9 | 7264.1 |
| 7.5° | 7056.5 | 7141.7 | 7209.9 | 7279.6 | 7273.4 |
| 10° | 6972.8 | 7089.1 | 7179.0 | 7236.3 | 7217.7 |
| 12.5° | 6864.3 | 7017.8 | 7106.1 | 7118.5 | 7082.8 |
| 15° | 6732.7 | 6921.7 | 6988.3 | 6935.6 | 6879.9 |
| 17.5° | 6583.9 | 6805.5 | 6828.7 | 6714.1 | 6644.4 |
| 20° | 6397.9 | 6650.5 | 6627.3 | 6469.2 | 6391.8 |
| 22.5° | 6191.9 | 6480.1 | 6405.7 | 6239.9 | 6165.5 |
| 25° | 5965.6 | 6284.9 | 6178.0 | 6061.7 | 6067.9 |
| 27.5° | 5700.7 | 6063.2 | 5959.5 | 6012.1 | 6111.3 |
| 30° | 5431.1 | 5830.9 | 5767.3 | 6074.1 | 6269.3 |
| 32.5° | 5135.1 | 5592.2 | 5649.5 | 6255.4 | 6574.6 |
| 35° | 4842.2 | 5353.6 | 5621.7 | 6556.0 | 6975.9 |
| 37.5° | 4518.4 | 5111.8 | 5666.6 | 6903.1 | 7343.2 |
| 40° | 4203.9 | 4876.3 | 5768.9 | 7214.6 | 7586.4 |
| 42.5° | 3883.1 | 4665.6 | 5940.9 | 7398.9 | 7688.7 |
| 45° | 3565.4 | 4485.8 | 6131.4 | 7423.7 | 7578.7 |
| 47.5° | 3247.8 | 4334.0 | 6263.1 | 7227.0 | 7155.7 |
| 50° | 2941.0 | 4199.2 | 6272.4 | 6754.3 | 6463.1 |
| 52.5° | 2654.3 | 4075.3 | 6102.0 | 6001.2 | 5548.8 |
| 55° | 2373.8 | 3929.6 | 5710.0 | 5006.5 | 4450.2 |
| 57.5° | 2118.2 | 3728.2 | 5105.7 | 3937.4 | 3329.9 |
| 60° | 1847.1 | 3455.4 | 4324.7 | 2880.5 | 2401.8 |
| 62.5° | 1597.6 | 3116.1 | 3449.2 | 2005.1 | 1726.2 |
| 65° | 1362.1 | 2722.5 | 2614.0 | 1453.4 | 1250.5 |
| 67.5° | 1112.6 | 2314.9 | 1929.1 | 1059.9 | 929.7 |
| 70° | 917.3 | 1936.9 | 1436.4 | 824.4 | 748.4 |
| 72.5° | 717.5 | 1577.4 | 1073.9 | 669.3 | 627.6 |
| 75° | 548.6 | 1273.7 | 839.8 | 574.9 | 545.4 |
| 77.5° | 404.4 | 1007.1 | 675.6 | 508.3 | 480.4 |
| 80° | 283.5 | 793.4 | 565.6 | 454.0 | 443.1 |
| 82.5° | 190.6 | 613.6 | 481.9 | 432.3 | 433.8 |
| 85° | 116.2 | 454.0 | 427.7 | 418.4 | 423.0 |
| 87.5° | 55.7 | 322.3 | 367.2 | 381.2 | 385.8 |
| 90° | 6.2 | 195.9 | 325.8 | 380.0 | 394.3 |
| 92.5° | 15.8 | 167.4 | 314.9 | 383.1 | 402.9 |
| 95° | 52.4 | 199.3 | 384.7 | 475.6 | 511.2 |
| 97.5° | 253.4 | 349.8 | 492.7 | 594.4 | 629.8 |
| 100° | 518.3 | 613.5 | 619.9 | 683.8 | 696.8 |
| 102.5° | 798.4 | 849.5 | 736.3 | 710.8 | 706.4 |
| 105° | 939.6 | 977.4 | 931.0 | 734.4 | 691.9 |



TEST NUMBER: P826399

CATALOG NUMBER: OHB-24HE-W-UNV-L830-CD-UPL24

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|-------|-------|-------|-------|-------|
| 112.5° | 761.2 | 800.3 | 850.4 | 850.7 | 824.0 |
| 115° | 653.2 | 681.4 | 740.4 | 758.6 | 756.2 |
| 117.5° | 561.8 | 579.7 | 634.5 | 652.2 | 654.7 |
| 120° | 466.9 | 489.5 | 542.8 | 556.7 | 552.7 |
| 122.5° | 393.3 | 412.2 | 459.6 | 474.9 | 470.8 |
| 125° | 325.4 | 346.8 | 390.5 | 405.1 | 403.8 |
| 127.5° | 275.4 | 289.1 | 332.5 | 348.9 | 349.5 |
| 130° | 241.0 | 248.5 | 285.7 | 302.1 | 306.1 |
| 132.5° | 215.0 | 221.5 | 249.7 | 268.9 | 271.1 |
| 135° | 195.4 | 199.1 | 221.1 | 240.1 | 243.4 |
| 137.5° | 179.6 | 182.4 | 198.8 | 217.1 | 220.2 |
| 140° | 165.6 | 169.4 | 180.2 | 197.6 | 200.1 |
| 142.5° | 155.1 | 157.3 | 165.6 | 179.9 | 181.5 |
| 145° | 147.3 | 148.0 | 152.3 | 162.5 | 166.6 |
| 147.5° | 138.9 | 141.2 | 143.0 | 151.0 | 152.6 |
| 150° | 132.4 | 134.3 | 134.0 | 138.0 | 142.1 |
| 152.5° | 125.9 | 127.8 | 127.5 | 128.4 | 131.5 |
| 155° | 120.3 | 122.2 | 121.0 | 121.9 | 121.9 |
| 157.5° | 103.3 | 105.2 | 107.0 | 107.9 | 107.9 |
| 160° | 99.6 | 100.5 | 102.4 | 103.3 | 103.3 |
| 162.5° | 95.8 | 96.8 | 97.7 | 98.6 | 98.6 |
| 165° | 93.1 | 94.0 | 94.9 | 94.9 | 94.9 |
| 167.5° | 90.3 | 90.3 | 91.2 | 92.1 | 92.1 |
| 170° | 87.5 | 88.4 | 88.4 | 89.3 | 89.3 |
| 172.5° | 85.6 | 86.5 | 86.5 | 86.5 | 87.5 |
| 175° | 83.8 | 84.7 | 84.7 | 85.6 | 85.6 |
| 177.5° | 83.8 | 83.8 | 83.8 | 83.8 | 83.8 |
| 180° | 83.8 | 83.8 | 83.8 | 83.8 | 83.8 |



Report Generated By 670246072 / DESKTOP-50001EG





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







| | | | | | |
|--------|-------|-------|-------|-------|-------|
| 107.5° | 944.8 | 988.8 | 998.4 | 834.9 | 724.4 |
| 110° | 872.2 | 914.7 | 945.6 | 898.8 | 810.7 |



(END OF REPORT)