

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: P827792

Luminaire Tested: **OHBL-36HE-MFL-UNV-L930-CD-UPL36**

Issue Date: 5/3/2024



Test Information

Test Method: LM-79-08
Report Number: P827792
REPORT IS A COMBINATION OF REPORTS P826313 AND G3-2310-221-2
Test Lab: INNOVATION CENTER
Issue Date: 5/3/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: OHBL-36HE-MFL-UNV-L930-CD-UPL36
Description:
Light Source: -
Ballast/Driver: -

Summary

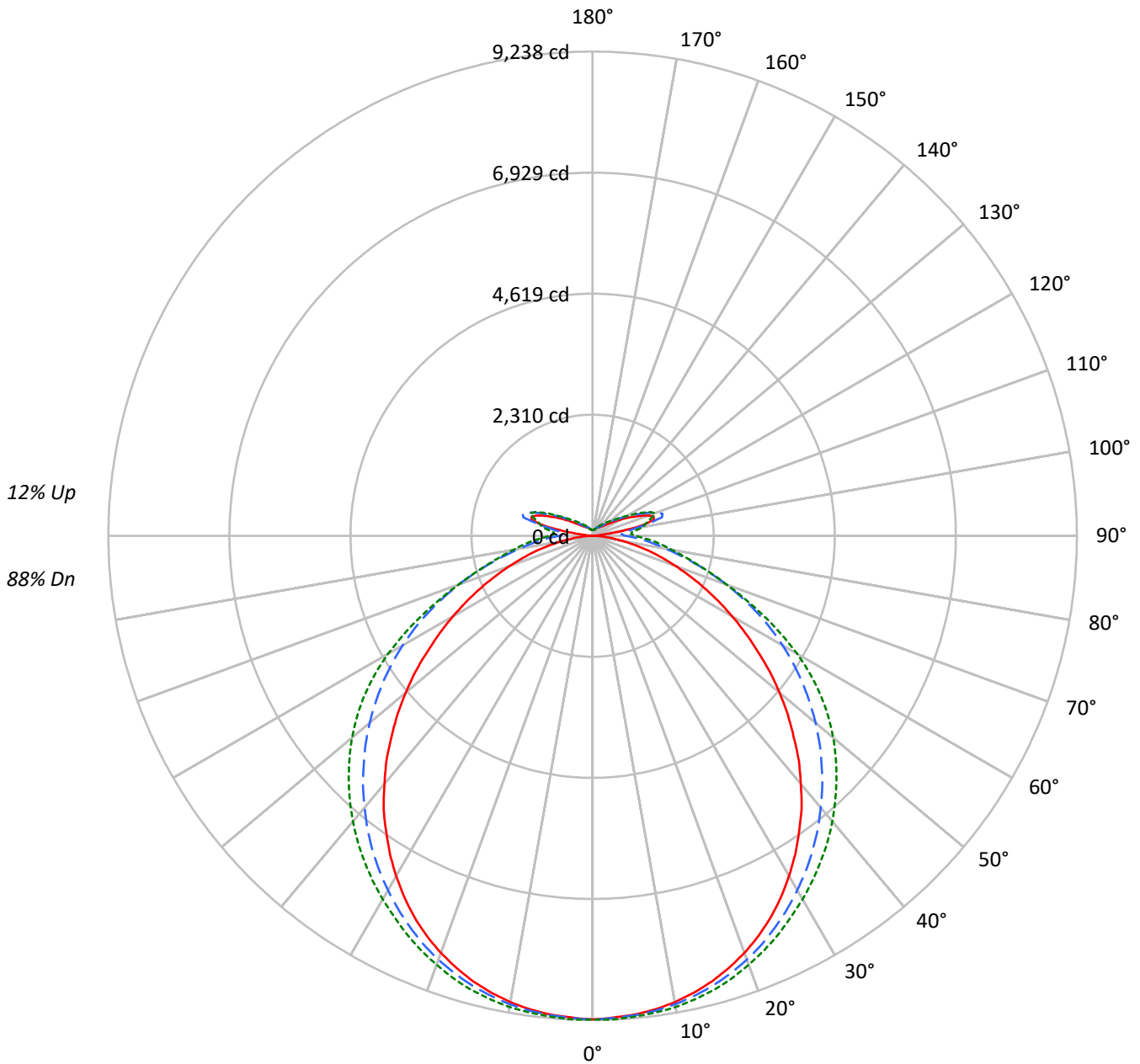
Lumens per Lamp: N/A
Luminaire Lumens: 30516.3 lumens
Efficiency: N/A
Efficacy: 126.7 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.29 / 1.38
Luminous Opening: Rectangular w/ Sides (W: 3.78' x L: 1.8' x H: 0.17')
CIE Type: Semi-Direct

Input Watts (W): 240.8
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: P827792

CATALOG NUMBER: OHBL-36HE-MFL-UNV-L930-CD-UPL36

Luminous Intensity Polar Plot





TEST NUMBER: P827792

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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

| | | | | | | | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|----|----|----|----|----|----|----|----|----|
| RF | 20 | | | | 20 | | | | 20 | | | | 20 | | | | 20 | | | | |
| RC | 80 | | | | 70 | | | | 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 | 104 | 104 | 104 | 97 | 97 | 97 | 91 | 91 | 91 | 88 | | | 88 |
| 1 | 105 | 100 | 96 | 92 | 101 | 97 | 93 | 89 | 90 | 87 | 84 | 84 | 82 | 80 | 79 | 77 | 75 | 72 | | | 72 |
| 2 | 96 | 87 | 80 | 75 | 92 | 84 | 78 | 73 | 79 | 74 | 69 | 74 | 70 | 66 | 69 | 66 | 63 | 60 | | | 60 |
| 3 | 87 | 77 | 68 | 62 | 84 | 74 | 67 | 61 | 69 | 63 | 58 | 65 | 60 | 55 | 61 | 57 | 53 | 50 | | | 50 |
| 4 | 80 | 68 | 59 | 52 | 77 | 66 | 58 | 51 | 62 | 55 | 49 | 58 | 52 | 47 | 54 | 49 | 45 | 43 | | | 43 |
| 5 | 73 | 61 | 52 | 45 | 70 | 59 | 50 | 44 | 55 | 48 | 43 | 52 | 46 | 41 | 49 | 44 | 39 | 37 | | | 37 |
| 6 | 68 | 54 | 46 | 39 | 65 | 53 | 45 | 39 | 50 | 43 | 37 | 47 | 41 | 36 | 44 | 39 | 35 | 32 | | | 32 |
| 7 | 63 | 49 | 41 | 35 | 60 | 48 | 40 | 34 | 45 | 38 | 33 | 43 | 36 | 32 | 40 | 35 | 31 | 29 | | | 29 |
| 8 | 58 | 45 | 36 | 31 | 56 | 44 | 36 | 30 | 41 | 34 | 29 | 39 | 33 | 28 | 37 | 32 | 28 | 26 | | | 26 |
| 9 | 54 | 41 | 33 | 28 | 52 | 40 | 32 | 27 | 38 | 31 | 26 | 36 | 30 | 26 | 34 | 29 | 25 | 23 | | | 23 |
| 10 | 51 | 38 | 30 | 25 | 49 | 37 | 30 | 25 | 35 | 28 | 24 | 33 | 27 | 23 | 32 | 26 | 23 | 21 | | | 21 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|-------|-------|-------|
| 0° | 14595 | 14595 | 14595 |
| 5° | 14441 | 14457 | 14563 |
| 10° | 14279 | 14330 | 14548 |
| 15° | 14059 | 14177 | 14510 |
| 20° | 13786 | 13991 | 14426 |
| 25° | 13443 | 13758 | 14343 |
| 30° | 12991 | 13505 | 14263 |
| 35° | 12457 | 13237 | 14209 |
| 40° | 11829 | 12927 | 14165 |
| 45° | 11101 | 12589 | 14094 |
| 50° | 10310 | 12249 | 14002 |
| 55° | 9356 | 11831 | 13786 |
| 60° | 8379 | 11339 | 13241 |
| 65° | 7320 | 10712 | 12263 |
| 70° | 6177 | 9911 | 11216 |
| 75° | 5015 | 8986 | 10666 |
| 80° | 3601 | 8317 | 11174 |
| 85° | 2031 | 8645 | 14007 |



TEST NUMBER: P827792

CATALOG NUMBER: OHBL-36HE-MFL-UNV-L930-CD-UPL36

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 874.5 | 2.9 |
| 10°-20° | 2508.8 | 8.2 |
| 20°-30° | 3794.1 | 12.4 |
| 30°-40° | 4554.9 | 14.9 |
| 40°-50° | 4704.5 | 15.4 |
| 50°-60° | 4232.5 | 13.9 |
| 60°-70° | 3188.3 | 10.4 |
| 70°-80° | 1925.2 | 6.3 |
| 80°-90° | 947.8 | 3.1 |
| 90°-100° | 618.7 | 2.0 |
| 100°-110° | 1233.5 | 4.0 |
| 110°-120° | 966.4 | 3.2 |
| 120°-130° | 469.7 | 1.5 |
| 130°-140° | 239.3 | 0.8 |
| 140°-150° | 136.0 | 0.4 |
| 150°-160° | 75.6 | 0.2 |
| 160°-170° | 35.6 | 0.1 |
| 170°-180° | 10.9 | 0.0 |
| 0°-30° | 7177.4 | 23.5 |
| 0°-40° | 11732.3 | 38.4 |
| 0°-60° | 20669.3 | 67.7 |
| 0°-90° | 26730.6 | 87.6 |
| 90°-120° | 2818.6 | 9.2 |
| 90°-150° | 3663.6 | 12.0 |
| 90°-180° | 3786.0 | 12.4 |
| 0°-180° | 30516.3 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|------|-------|------|-------|------|------|
| 0° | 9229 | 9229 | 9229 | 9229 | 9229 | |
| 5° | 9170 | 9195 | 9184 | 9220 | 9209 | 871 |
| 15° | 8800 | 8843 | 8883 | 8958 | 8967 | 2481 |
| 25° | 8036 | 8124 | 8240 | 8368 | 8389 | 3697 |
| 35° | 6871 | 7031 | 7320 | 7542 | 7587 | 4295 |
| 45° | 5423 | 5696 | 6173 | 6510 | 6580 | 4187 |
| 55° | 3842 | 4240 | 4883 | 5251 | 5315 | 3445 |
| 65° | 2344 | 2823 | 3456 | 3628 | 3587 | 2329 |
| 75° | 1104 | 1586 | 2001 | 2053 | 2033 | 1178 |
| 85° | 230 | 608 | 1003 | 1141 | 1161 | 266 |
| 90° | 6 | 277 | 625 | 781 | 811 | 19 |
| 95° | 61 | 261 | 562 | 716 | 750 | 196 |
| 105° | 1210 | 1284 | 1369 | 1159 | 1091 | 1151 |
| 115° | 851 | 873 | 981 | 1039 | 1040 | 860 |
| 125° | 428 | 449 | 527 | 560 | 559 | 402 |
| 135° | 258 | 268 | 302 | 338 | 348 | 204 |
| 145° | 199 | 200 | 207 | 227 | 235 | 126 |
| 155° | 165 | 170 | 170 | 169 | 171 | 73 |
| 165° | 122 | 124 | 124 | 125 | 126 | 35 |
| 175° | 112 | 112 | 112 | 112 | 113 | 11 |
| 180° | 110 | 110 | 110 | 110 | 110 | |



TEST NUMBER: P827792

CATALOG NUMBER: OHBL-36HE-MFL-UNV-L930-CD-UPL36

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|--------|--------|--------|--------|--------|
| 0° | 9229.0 | 9229.0 | 9229.0 | 9229.0 | 9229.0 |
| 2.5° | 9201.9 | 9224.5 | 9210.9 | 9240.3 | 9238.0 |
| 5° | 9170.2 | 9195.1 | 9183.8 | 9219.9 | 9208.6 |
| 7.5° | 9116.1 | 9143.1 | 9140.9 | 9181.5 | 9177.0 |
| 10° | 9037.0 | 9066.3 | 9075.4 | 9129.6 | 9129.6 |
| 12.5° | 8928.5 | 8967.0 | 8989.6 | 9055.0 | 9057.3 |
| 15° | 8799.8 | 8842.8 | 8883.4 | 8958.0 | 8967.0 |
| 17.5° | 8644.0 | 8698.2 | 8754.7 | 8840.5 | 8851.7 |
| 20° | 8467.8 | 8528.8 | 8605.6 | 8695.9 | 8709.5 |
| 22.5° | 8264.5 | 8336.8 | 8436.2 | 8542.3 | 8558.1 |
| 25° | 8036.4 | 8124.5 | 8239.7 | 8368.4 | 8388.7 |
| 27.5° | 7776.7 | 7878.3 | 8034.1 | 8178.7 | 8196.7 |
| 30° | 7494.3 | 7614.0 | 7808.3 | 7979.9 | 8009.3 |
| 32.5° | 7196.2 | 7333.9 | 7573.4 | 7765.3 | 7806.0 |
| 35° | 6870.9 | 7031.3 | 7320.3 | 7541.8 | 7586.9 |
| 37.5° | 6550.2 | 6726.4 | 7053.8 | 7306.8 | 7361.0 |
| 40° | 6175.3 | 6394.3 | 6769.3 | 7049.3 | 7114.9 |
| 42.5° | 5822.9 | 6060.1 | 6484.7 | 6789.6 | 6852.8 |
| 45° | 5423.1 | 5696.4 | 6173.0 | 6509.5 | 6579.5 |
| 47.5° | 5048.1 | 5344.1 | 5872.5 | 6220.4 | 6292.7 |
| 50° | 4652.8 | 4978.1 | 5551.9 | 5915.5 | 5990.0 |
| 52.5° | 4257.7 | 4607.7 | 5219.8 | 5597.0 | 5667.1 |
| 55° | 3842.0 | 4239.5 | 4883.3 | 5251.4 | 5314.7 |
| 57.5° | 3455.8 | 3875.9 | 4537.7 | 4887.7 | 4926.1 |
| 60° | 3074.1 | 3510.0 | 4185.3 | 4492.6 | 4506.1 |
| 62.5° | 2701.4 | 3159.9 | 3824.0 | 4067.9 | 4049.8 |
| 65° | 2344.5 | 2823.3 | 3455.8 | 3627.5 | 3586.8 |
| 67.5° | 2001.2 | 2495.8 | 3078.6 | 3189.3 | 3135.0 |
| 70° | 1675.9 | 2177.4 | 2712.7 | 2769.1 | 2719.5 |
| 72.5° | 1389.1 | 1874.7 | 2342.2 | 2389.7 | 2353.5 |
| 75° | 1104.5 | 1585.6 | 2001.2 | 2053.2 | 2032.8 |
| 77.5° | 838.0 | 1305.5 | 1687.2 | 1755.0 | 1759.5 |
| 80° | 603.1 | 1050.3 | 1413.9 | 1520.1 | 1533.7 |
| 82.5° | 397.5 | 815.4 | 1185.8 | 1321.3 | 1341.7 |
| 85° | 230.4 | 607.6 | 1002.8 | 1140.6 | 1160.9 |
| 87.5° | 99.3 | 438.2 | 806.3 | 930.6 | 955.4 |
| 90° | 6.5 | 276.8 | 624.6 | 781.0 | 811.2 |
| 92.5° | 27.0 | 245.0 | 554.6 | 705.5 | 735.2 |
| 95° | 61.4 | 260.6 | 562.5 | 716.3 | 749.6 |
| 97.5° | 315.9 | 460.5 | 654.8 | 813.7 | 853.4 |
| 100° | 662.7 | 783.5 | 839.5 | 938.4 | 972.7 |
| 102.5° | 1030.5 | 1134.5 | 1097.2 | 1040.1 | 1031.6 |
| 105° | 1209.8 | 1284.1 | 1368.8 | 1158.7 | 1091.3 |



TEST NUMBER: P827792

CATALOG NUMBER: OHBL-36HE-MFL-UNV-L930-CD-UPL36

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|-------|--------|--------|--------|--------|
| 112.5° | 996.2 | 1041.5 | 1143.3 | 1198.8 | 1181.9 |
| 115° | 850.7 | 873.2 | 981.3 | 1039.0 | 1039.9 |
| 117.5° | 732.4 | 749.2 | 846.1 | 892.5 | 890.4 |
| 120° | 619.3 | 637.4 | 726.8 | 760.6 | 763.2 |
| 122.5° | 516.6 | 539.2 | 619.4 | 654.3 | 650.5 |
| 125° | 427.9 | 449.2 | 526.7 | 560.1 | 558.7 |
| 127.5° | 367.5 | 376.8 | 446.8 | 483.5 | 490.3 |
| 130° | 318.2 | 326.9 | 385.4 | 425.4 | 430.6 |
| 132.5° | 284.2 | 295.1 | 339.4 | 378.0 | 389.4 |
| 135° | 258.3 | 268.4 | 302.1 | 338.4 | 348.2 |
| 137.5° | 237.3 | 246.6 | 269.6 | 305.2 | 315.1 |
| 140° | 221.8 | 228.8 | 245.0 | 275.4 | 284.4 |
| 142.5° | 209.4 | 214.3 | 222.9 | 250.2 | 257.0 |
| 145° | 198.8 | 200.5 | 206.9 | 227.4 | 235.0 |
| 147.5° | 189.1 | 192.3 | 196.3 | 206.2 | 213.8 |
| 150° | 180.2 | 184.9 | 185.8 | 189.7 | 197.3 |
| 152.5° | 172.1 | 176.8 | 177.8 | 176.3 | 181.6 |
| 155° | 164.8 | 169.5 | 169.7 | 169.0 | 171.3 |
| 157.5° | 135.8 | 138.2 | 140.6 | 141.5 | 141.5 |
| 160° | 131.0 | 132.6 | 135.0 | 135.0 | 135.8 |
| 162.5° | 126.1 | 127.7 | 129.3 | 130.1 | 131.0 |
| 165° | 122.1 | 123.7 | 124.5 | 125.3 | 126.1 |
| 167.5° | 118.8 | 119.6 | 120.4 | 121.2 | 121.2 |
| 170° | 115.6 | 116.4 | 117.2 | 117.2 | 118.0 |
| 172.5° | 113.2 | 114.0 | 114.8 | 114.8 | 114.8 |
| 175° | 111.6 | 111.6 | 112.4 | 112.4 | 113.2 |
| 177.5° | 109.9 | 110.7 | 110.7 | 110.7 | 111.6 |
| 180° | 109.9 | 109.9 | 109.9 | 109.9 | 109.9 |



Report Generated By 670246072 / DESKTOP-50001EG





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







| | | | | | |
|--------|--------|--------|--------|--------|--------|
| 107.5° | 1221.1 | 1289.0 | 1397.6 | 1327.0 | 1197.6 |
| 110° | 1128.1 | 1195.0 | 1298.4 | 1315.6 | 1263.0 |



(END OF REPORT)