

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: P842882

Luminaire Tested: **14CZ2-44-S-UNV-B40**

Issue Date: 1/5/2024



Test Information

Test Method: LM-79-08
Report Number: P842882
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P275670)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 1/5/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 14CZ2-44-S-UNV-B40
Description: 1X4 4400 LUMEN CRUZE TROFFER WITH BIO UP LEDS AT 4000K CCT AND SMOOTH LENS

Light Source: -
Ballast/Driver: -

Summary

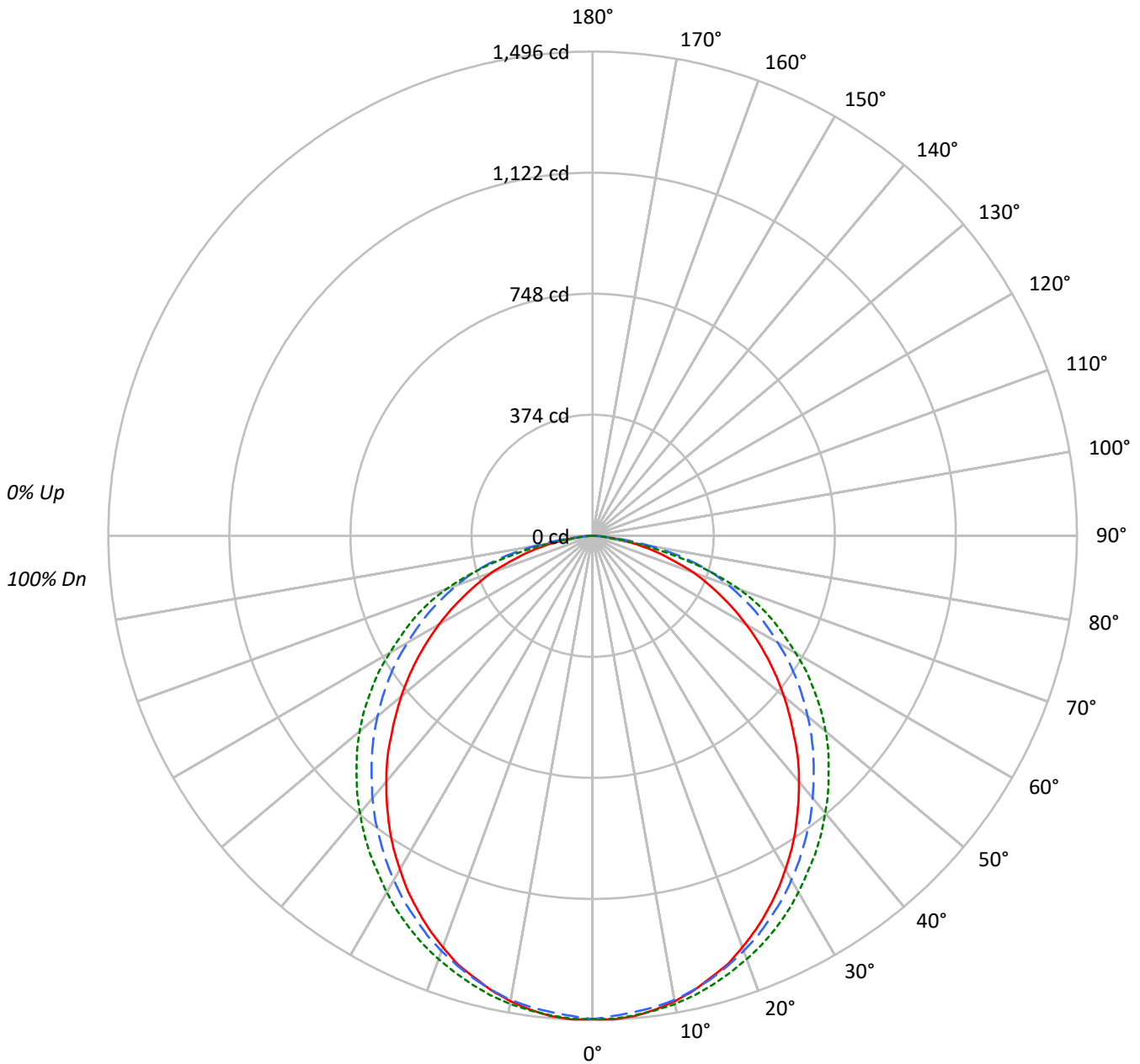
Lumens per Lamp: N/A
Luminaire Lumens: 4184.0 lumens
Efficiency: N/A
Efficacy: 116.2 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.27 / 1.36
Luminous Opening: Rectangular (W 0.96' x L: 3.98' x H: 0')
CIE Type: Direct

Input Watts (W): 36
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

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Luminous Intensity Polar Plot





TEST NUMBER: P842882

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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 | 100 | | | | | | | | | | | | | | | | | | | |
| 1 | 109 | 104 | 100 | 96 | 106 | 102 | 98 | 94 | 97 | 94 | 91 | 94 | 91 | 89 | 90 | 88 | 86 | 84 | | | | | | | | | | | | | | | | | | | |
| 2 | 99 | 90 | 84 | 78 | 96 | 89 | 82 | 77 | 85 | 80 | 75 | 82 | 77 | 73 | 79 | 75 | 72 | 70 | | | | | | | | | | | | | | | | | | | |
| 3 | 90 | 79 | 71 | 65 | 87 | 78 | 70 | 64 | 75 | 68 | 63 | 72 | 66 | 62 | 69 | 65 | 61 | 58 | | | | | | | | | | | | | | | | | | | |
| 4 | 82 | 70 | 61 | 55 | 80 | 69 | 61 | 54 | 66 | 59 | 53 | 64 | 58 | 53 | 62 | 56 | 52 | 50 | | | | | | | | | | | | | | | | | | | |
| 5 | 76 | 63 | 54 | 47 | 74 | 62 | 53 | 47 | 59 | 52 | 46 | 57 | 51 | 46 | 56 | 50 | 45 | 43 | | | | | | | | | | | | | | | | | | | |
| 6 | 70 | 56 | 47 | 41 | 68 | 55 | 47 | 41 | 54 | 46 | 40 | 52 | 45 | 40 | 50 | 44 | 40 | 38 | | | | | | | | | | | | | | | | | | | |
| 7 | 65 | 51 | 42 | 36 | 63 | 50 | 42 | 36 | 49 | 41 | 36 | 47 | 41 | 35 | 46 | 40 | 35 | 33 | | | | | | | | | | | | | | | | | | | |
| 8 | 60 | 47 | 38 | 32 | 59 | 46 | 38 | 32 | 45 | 37 | 32 | 43 | 37 | 32 | 42 | 36 | 32 | 30 | | | | | | | | | | | | | | | | | | | |
| 9 | 56 | 43 | 35 | 29 | 55 | 42 | 34 | 29 | 41 | 34 | 29 | 40 | 33 | 29 | 39 | 33 | 28 | 27 | | | | | | | | | | | | | | | | | | | |
| 10 | 53 | 40 | 32 | 26 | 52 | 39 | 31 | 26 | 38 | 31 | 26 | 37 | 31 | 26 | 36 | 30 | 26 | 24 | | | | | | | | | | | | | | | | | | | |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|------|------|------|
| 0° | 4216 | 4216 | 4216 |
| 5° | 4221 | 4185 | 4214 |
| 10° | 4186 | 4174 | 4210 |
| 15° | 4129 | 4141 | 4195 |
| 20° | 4063 | 4100 | 4181 |
| 25° | 3980 | 4051 | 4167 |
| 30° | 3881 | 4002 | 4145 |
| 35° | 3774 | 3946 | 4132 |
| 40° | 3654 | 3898 | 4120 |
| 45° | 3519 | 3851 | 4116 |
| 50° | 3389 | 3807 | 4127 |
| 55° | 3246 | 3778 | 4114 |
| 60° | 3093 | 3724 | 4087 |
| 65° | 2910 | 3713 | 4088 |
| 70° | 2740 | 3682 | 3971 |
| 75° | 2375 | 3598 | 3393 |
| 80° | 1921 | 2900 | 2259 |
| 85° | 1276 | 1004 | 674 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 141.0 | 3.4 |
| 10°-20° | 401.3 | 9.6 |
| 20°-30° | 602.0 | 14.4 |
| 30°-40° | 718.1 | 17.2 |
| 40°-50° | 742.4 | 17.7 |
| 50°-60° | 677.8 | 16.2 |
| 60°-70° | 533.4 | 12.7 |
| 70°-80° | 310.5 | 7.4 |
| 80°-90° | 57.2 | 1.4 |
| 90°-100° | 0.0 | 0.0 |
| 100°-110° | 0.0 | 0.0 |
| 110°-120° | 0.0 | 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° | 1144.4 | 27.4 |
| 0°-40° | 1862.6 | 44.5 |
| 0°-60° | 3282.8 | 78.5 |
| 0°-90° | 4184.0 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 4184.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|------|-------|------|-------|------|------|
| 0° | 1494 | 1494 | 1494 | 1494 | 1494 | |
| 5° | 1490 | 1485 | 1477 | 1490 | 1487 | 141 |
| 15° | 1413 | 1415 | 1417 | 1435 | 1435 | 399 |
| 25° | 1278 | 1284 | 1301 | 1332 | 1338 | 588 |
| 35° | 1095 | 1110 | 1145 | 1189 | 1199 | 685 |
| 45° | 882 | 911 | 965 | 1018 | 1031 | 681 |
| 55° | 660 | 695 | 768 | 824 | 836 | 590 |
| 65° | 436 | 481 | 556 | 600 | 612 | 433 |
| 75° | 218 | 270 | 330 | 324 | 311 | 232 |
| 85° | 39 | 56 | 31 | 25 | 21 | 51 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P842882

CATALOG NUMBER: 14CZ2-44-S-UNV-B40

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|--------|--------|--------|--------|--------|
| 0° | 1493.6 | 1493.6 | 1493.6 | 1493.6 | 1493.6 |
| 2.5° | 1495.7 | 1491.6 | 1485.2 | 1495.7 | 1493.6 |
| 5° | 1489.6 | 1485.2 | 1477.1 | 1489.6 | 1487.3 |
| 7.5° | 1477.1 | 1472.8 | 1468.7 | 1481.2 | 1479.1 |
| 10° | 1460.3 | 1458.3 | 1456.3 | 1470.8 | 1468.7 |
| 12.5° | 1439.7 | 1439.7 | 1437.7 | 1454.2 | 1454.2 |
| 15° | 1412.8 | 1414.8 | 1416.9 | 1435.4 | 1435.4 |
| 17.5° | 1387.9 | 1385.9 | 1392.0 | 1412.8 | 1414.8 |
| 20° | 1352.6 | 1356.6 | 1365.0 | 1389.9 | 1392.0 |
| 22.5° | 1317.2 | 1321.5 | 1336.0 | 1360.9 | 1367.0 |
| 25° | 1277.8 | 1284.2 | 1300.7 | 1331.7 | 1338.1 |
| 27.5° | 1236.4 | 1244.8 | 1267.4 | 1300.7 | 1306.8 |
| 30° | 1190.6 | 1203.1 | 1228.0 | 1265.4 | 1271.7 |
| 32.5° | 1145.1 | 1157.6 | 1188.6 | 1226.0 | 1234.4 |
| 35° | 1095.3 | 1109.8 | 1145.1 | 1188.6 | 1199.0 |
| 37.5° | 1043.5 | 1062.0 | 1103.7 | 1147.2 | 1159.6 |
| 40° | 991.6 | 1012.4 | 1057.9 | 1103.7 | 1118.2 |
| 42.5° | 939.7 | 960.6 | 1010.2 | 1062.0 | 1076.8 |
| 45° | 881.5 | 910.8 | 964.7 | 1018.5 | 1031.0 |
| 47.5° | 825.6 | 856.9 | 916.9 | 970.8 | 987.5 |
| 50° | 771.7 | 802.7 | 867.0 | 923.2 | 939.7 |
| 52.5° | 715.8 | 748.8 | 817.2 | 875.4 | 889.9 |
| 55° | 659.6 | 695.0 | 767.7 | 823.6 | 836.0 |
| 57.5° | 603.7 | 641.1 | 715.8 | 769.7 | 784.2 |
| 60° | 547.8 | 587.2 | 659.6 | 713.5 | 723.9 |
| 62.5° | 491.6 | 533.0 | 607.8 | 655.6 | 666.0 |
| 65° | 435.7 | 481.2 | 555.9 | 599.6 | 612.1 |
| 67.5° | 381.8 | 427.3 | 500.0 | 541.4 | 551.9 |
| 70° | 332.0 | 373.4 | 446.1 | 477.1 | 481.2 |
| 72.5° | 269.7 | 321.6 | 392.0 | 408.7 | 398.3 |
| 75° | 217.8 | 269.7 | 329.9 | 323.6 | 311.1 |
| 77.5° | 166.0 | 217.8 | 257.2 | 236.4 | 219.9 |
| 80° | 118.2 | 170.1 | 178.4 | 147.2 | 139.0 |
| 82.5° | 76.8 | 118.2 | 99.6 | 76.8 | 62.3 |
| 85° | 39.4 | 55.9 | 31.0 | 24.9 | 20.8 |
| 87.5° | 12.5 | 8.4 | 4.1 | 4.1 | 2.0 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |



Report Generated By 670246072 / DESKTOP-50001EG





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







(END OF REPORT)