

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: P843138

Luminaire Tested: **24CZ2-55HE-S-UNV-B50**

Issue Date: 1/5/2024

Test Information

Test Method: LM-79-08
Report Number: P843138
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P272125)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 1/5/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-55HE-S-UNV-B50
Description: 2X4 5500 LUMEN CRUZE TROFFER WITH BIO UP LEDS AT 5000K CCT AND SMOOTH LENS

Light Source: -
Ballast/Driver: -

Summary

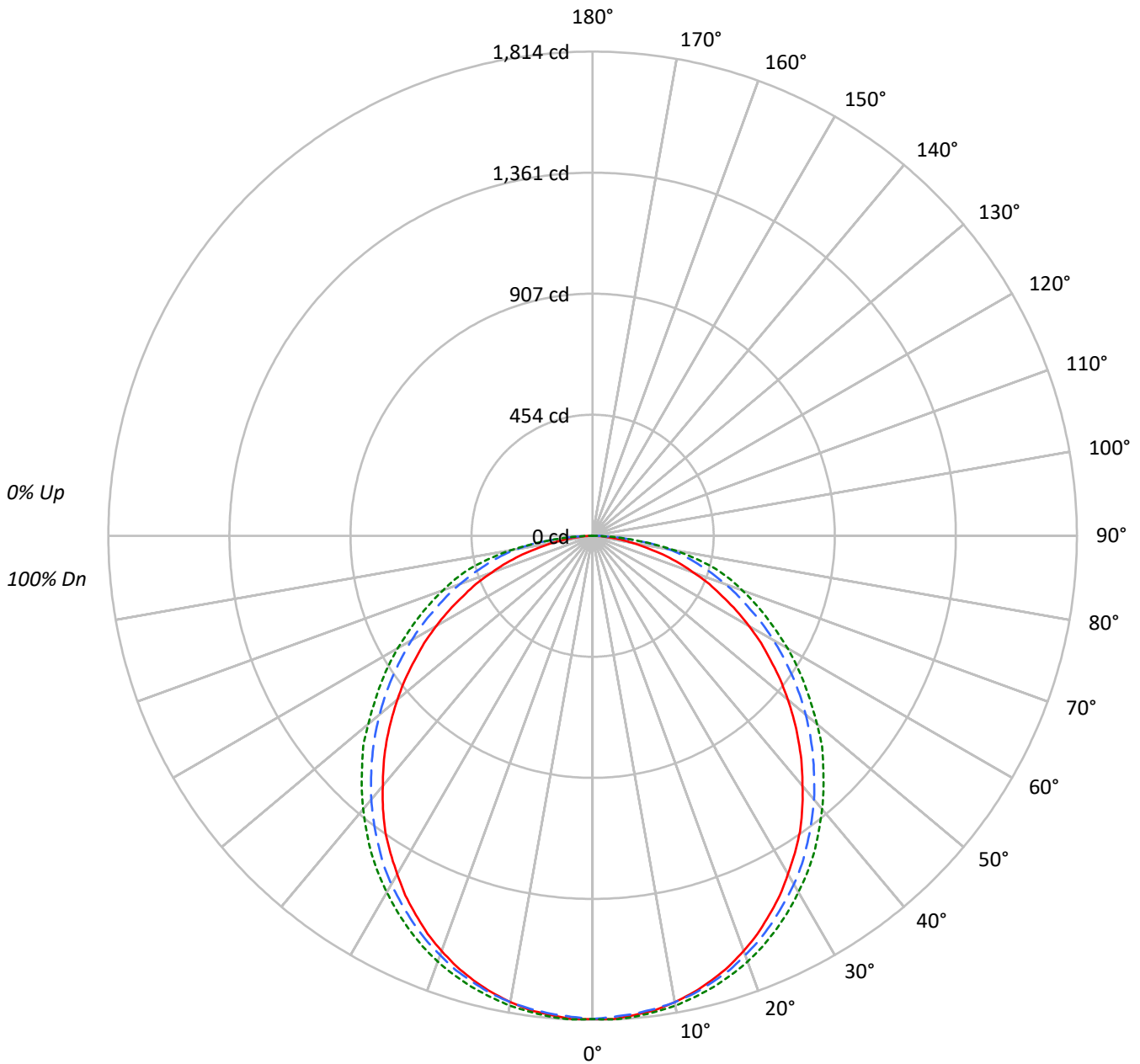
Lumens per Lamp: N/A
Luminaire Lumens: 5154.0 lumens
Efficiency: N/A
Efficacy: 122.7 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.26 / 1.35
Luminous Opening: Rectangular (W 1.92' x L: 3.98' x H: 0')
CIE Type: Direct

Input Watts (W): 42
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





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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 | 108 | 103 | 99 | 95 | 106 | 101 | 97 | 93 | 97 | 93 | 90 | 93 | 90 | 88 | 89 | 87 | 85 | 83 | | | | | | | | | | | | | | | | | | | |
| 2 | 98 | 90 | 83 | 77 | 96 | 88 | 81 | 76 | 84 | 79 | 74 | 81 | 76 | 72 | 78 | 74 | 71 | 69 | | | | | | | | | | | | | | | | | | | |
| 3 | 89 | 79 | 70 | 64 | 87 | 77 | 69 | 63 | 74 | 67 | 62 | 71 | 66 | 61 | 69 | 64 | 60 | 58 | | | | | | | | | | | | | | | | | | | |
| 4 | 82 | 70 | 61 | 54 | 80 | 68 | 60 | 54 | 66 | 59 | 53 | 63 | 57 | 52 | 61 | 56 | 51 | 49 | | | | | | | | | | | | | | | | | | | |
| 5 | 75 | 62 | 53 | 46 | 73 | 61 | 53 | 46 | 59 | 51 | 46 | 57 | 50 | 45 | 55 | 49 | 45 | 42 | | | | | | | | | | | | | | | | | | | |
| 6 | 70 | 56 | 47 | 40 | 68 | 55 | 47 | 40 | 53 | 46 | 40 | 52 | 45 | 40 | 50 | 44 | 39 | 37 | | | | | | | | | | | | | | | | | | | |
| 7 | 64 | 51 | 42 | 36 | 63 | 50 | 42 | 36 | 48 | 41 | 35 | 47 | 40 | 35 | 46 | 39 | 35 | 33 | | | | | | | | | | | | | | | | | | | |
| 8 | 60 | 46 | 38 | 32 | 58 | 46 | 37 | 32 | 44 | 37 | 32 | 43 | 36 | 31 | 42 | 36 | 31 | 29 | | | | | | | | | | | | | | | | | | | |
| 9 | 56 | 43 | 34 | 29 | 55 | 42 | 34 | 29 | 41 | 34 | 28 | 40 | 33 | 28 | 39 | 33 | 28 | 26 | | | | | | | | | | | | | | | | | | | |
| 10 | 53 | 39 | 31 | 26 | 51 | 39 | 31 | 26 | 38 | 31 | 26 | 37 | 30 | 26 | 36 | 30 | 26 | 24 | | | | | | | | | | | | | | | | | | | |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|------|------|------|
| 0° | 2556 | 2556 | 2556 |
| 5° | 2554 | 2547 | 2563 |
| 10° | 2543 | 2543 | 2562 |
| 15° | 2519 | 2531 | 2557 |
| 20° | 2486 | 2510 | 2550 |
| 25° | 2440 | 2486 | 2534 |
| 30° | 2385 | 2457 | 2513 |
| 35° | 2333 | 2417 | 2493 |
| 40° | 2253 | 2377 | 2464 |
| 45° | 2180 | 2330 | 2438 |
| 50° | 2096 | 2286 | 2408 |
| 55° | 2002 | 2244 | 2385 |
| 60° | 1909 | 2209 | 2380 |
| 65° | 1788 | 2170 | 2394 |
| 70° | 1655 | 2182 | 2459 |
| 75° | 1482 | 2223 | 2597 |
| 80° | 1197 | 2355 | 2541 |
| 85° | 900 | 2066 | 2016 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 171.4 | 3.3 |
| 10°-20° | 489.8 | 9.5 |
| 20°-30° | 736.3 | 14.3 |
| 30°-40° | 877.0 | 17.0 |
| 40°-50° | 897.6 | 17.4 |
| 50°-60° | 808.1 | 15.7 |
| 60°-70° | 634.6 | 12.3 |
| 70°-80° | 411.9 | 8.0 |
| 80°-90° | 127.4 | 2.5 |
| 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° | 1397.5 | 27.1 |
| 0°-40° | 2274.5 | 44.1 |
| 0°-60° | 3980.2 | 77.2 |
| 0°-90° | 5154.0 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 5154.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|------|-------|------|-------|------|------|
| 0° | 1811 | 1811 | 1811 | 1811 | 1811 | |
| 5° | 1802 | 1806 | 1798 | 1807 | 1809 | 171 |
| 15° | 1724 | 1729 | 1732 | 1747 | 1750 | 486 |
| 25° | 1567 | 1580 | 1596 | 1622 | 1627 | 722 |
| 35° | 1354 | 1370 | 1403 | 1437 | 1447 | 845 |
| 45° | 1092 | 1118 | 1167 | 1212 | 1221 | 842 |
| 55° | 814 | 850 | 912 | 959 | 969 | 729 |
| 65° | 535 | 576 | 650 | 704 | 717 | 533 |
| 75° | 272 | 324 | 408 | 463 | 476 | 288 |
| 85° | 56 | 103 | 128 | 124 | 124 | 67 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P843138

CATALOG NUMBER: 24CZ2-55HE-S-UNV-B50

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|--------|--------|--------|--------|--------|
| 0° | 1810.7 | 1810.7 | 1810.7 | 1810.7 | 1810.7 |
| 2.5° | 1812.3 | 1812.3 | 1804.0 | 1812.3 | 1813.9 |
| 5° | 1802.4 | 1805.8 | 1797.5 | 1807.4 | 1808.9 |
| 7.5° | 1792.6 | 1792.6 | 1787.6 | 1797.5 | 1799.3 |
| 10° | 1774.6 | 1776.2 | 1774.6 | 1786.1 | 1787.6 |
| 12.5° | 1751.7 | 1754.9 | 1756.7 | 1768.1 | 1769.7 |
| 15° | 1723.9 | 1728.9 | 1732.0 | 1746.8 | 1750.2 |
| 17.5° | 1692.8 | 1697.7 | 1705.8 | 1722.2 | 1725.5 |
| 20° | 1655.1 | 1661.6 | 1671.5 | 1692.8 | 1697.7 |
| 22.5° | 1614.3 | 1620.8 | 1637.1 | 1656.7 | 1665.0 |
| 25° | 1566.7 | 1579.7 | 1596.1 | 1622.3 | 1627.3 |
| 27.5° | 1519.2 | 1530.6 | 1551.9 | 1579.7 | 1586.4 |
| 30° | 1463.6 | 1481.5 | 1507.7 | 1535.6 | 1542.1 |
| 32.5° | 1409.5 | 1427.5 | 1458.6 | 1488.2 | 1496.3 |
| 35° | 1353.9 | 1370.3 | 1403.0 | 1437.3 | 1447.2 |
| 37.5° | 1290.0 | 1311.3 | 1347.4 | 1381.7 | 1391.6 |
| 40° | 1222.9 | 1249.2 | 1290.0 | 1326.1 | 1337.5 |
| 42.5° | 1159.0 | 1186.8 | 1227.9 | 1267.1 | 1280.1 |
| 45° | 1092.0 | 1118.2 | 1167.3 | 1211.5 | 1221.3 |
| 47.5° | 1023.1 | 1052.7 | 1105.0 | 1149.2 | 1165.5 |
| 50° | 954.5 | 985.6 | 1041.3 | 1087.0 | 1096.9 |
| 52.5° | 885.6 | 918.4 | 977.4 | 1026.5 | 1031.4 |
| 55° | 813.6 | 849.7 | 911.9 | 959.4 | 969.3 |
| 57.5° | 748.2 | 779.3 | 846.4 | 895.5 | 906.9 |
| 60° | 676.2 | 710.5 | 782.5 | 828.4 | 843.0 |
| 62.5° | 607.3 | 643.4 | 718.8 | 764.5 | 777.5 |
| 65° | 535.3 | 576.4 | 649.9 | 704.0 | 717.0 |
| 67.5° | 473.2 | 512.4 | 590.9 | 643.4 | 656.4 |
| 70° | 401.0 | 445.4 | 528.8 | 582.9 | 595.9 |
| 72.5° | 338.9 | 384.6 | 468.3 | 520.5 | 540.3 |
| 75° | 271.8 | 324.1 | 407.7 | 463.3 | 476.3 |
| 77.5° | 206.3 | 266.9 | 351.9 | 394.5 | 394.5 |
| 80° | 147.3 | 211.3 | 289.8 | 309.5 | 312.6 |
| 82.5° | 96.7 | 158.8 | 214.4 | 212.8 | 212.8 |
| 85° | 55.6 | 103.2 | 127.6 | 124.5 | 124.5 |
| 87.5° | 21.3 | 42.6 | 45.8 | 45.8 | 44.2 |
| 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)