

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: P183984

Luminaire Tested: **14SR-LD2-45-S-UNV-L840-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P183984
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P166748)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 14SR-LD2-45-S-UNV-L840-CD1-U
Description: METALUX SKYRIDGE EDGELIT LED 1X4 TROFFER

Light Source: EATON LED 4000K
Ballast/Driver: OSRAM ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4549.6 lumens
Efficiency: N/A
Efficacy: 120.0 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.5 / 1.46
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

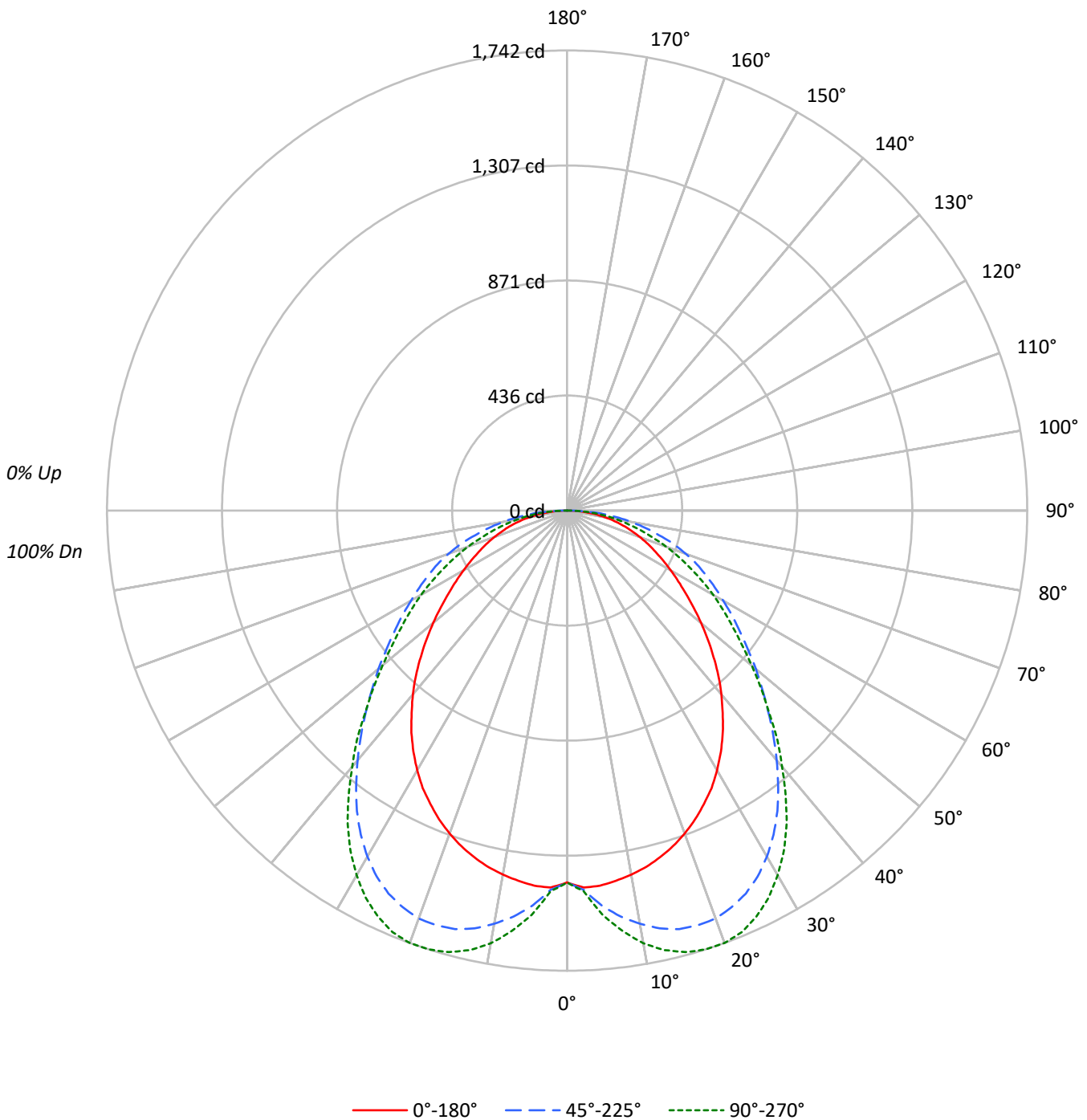
Input Watts (W): 37.9
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

| | | | | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| RF | 20 | | | | 20 | | | | 20 | | | | 20 | | | | 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 | 0 |
| RCR | | | | | | | | | | | | | | | | | | |
| 0 | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | 106 | 106 | 106 | 102 | 102 | 102 | 100 |
| 1 | 108 | 104 | 99 | 95 | 106 | 101 | 97 | 94 | 97 | 94 | 91 | 93 | 90 | 88 | 89 | 87 | 85 | 83 |
| 2 | 99 | 90 | 83 | 78 | 96 | 88 | 82 | 77 | 85 | 80 | 75 | 82 | 77 | 73 | 79 | 75 | 72 | 69 |
| 3 | 90 | 79 | 71 | 65 | 88 | 78 | 70 | 64 | 75 | 68 | 63 | 72 | 67 | 62 | 70 | 65 | 61 | 59 |
| 4 | 83 | 71 | 62 | 55 | 80 | 69 | 61 | 55 | 67 | 60 | 54 | 64 | 58 | 53 | 62 | 57 | 52 | 50 |
| 5 | 76 | 63 | 54 | 48 | 74 | 62 | 54 | 47 | 60 | 52 | 47 | 58 | 51 | 46 | 56 | 50 | 46 | 44 |
| 6 | 70 | 57 | 48 | 42 | 68 | 56 | 48 | 41 | 54 | 47 | 41 | 53 | 46 | 41 | 51 | 45 | 40 | 38 |
| 7 | 65 | 52 | 43 | 37 | 64 | 51 | 43 | 37 | 49 | 42 | 36 | 48 | 41 | 36 | 47 | 41 | 36 | 34 |
| 8 | 61 | 47 | 39 | 33 | 59 | 47 | 38 | 33 | 45 | 38 | 33 | 44 | 37 | 32 | 43 | 37 | 32 | 30 |
| 9 | 57 | 43 | 35 | 30 | 55 | 43 | 35 | 30 | 42 | 34 | 29 | 41 | 34 | 29 | 40 | 34 | 29 | 27 |
| 10 | 53 | 40 | 32 | 27 | 52 | 40 | 32 | 27 | 39 | 32 | 27 | 38 | 31 | 27 | 37 | 31 | 27 | 25 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|------|------|------|
| 0° | 3789 | 3789 | 3789 |
| 5° | 3851 | 4055 | 4148 |
| 10° | 3824 | 4339 | 4546 |
| 15° | 3785 | 4570 | 4820 |
| 20° | 3725 | 4706 | 4988 |
| 25° | 3638 | 4749 | 5034 |
| 30° | 3527 | 4700 | 4952 |
| 35° | 3376 | 4558 | 4759 |
| 40° | 3192 | 4334 | 4446 |
| 45° | 2983 | 4099 | 4110 |
| 50° | 2771 | 3902 | 3817 |
| 55° | 2574 | 3745 | 3582 |
| 60° | 2437 | 3672 | 3437 |
| 65° | 2348 | 3696 | 3272 |
| 70° | 2308 | 3747 | 3129 |
| 75° | 2293 | 3743 | 2989 |
| 80° | 2252 | 3780 | 2924 |
| 85° | 2152 | 3943 | 2958 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 144.1 | 3.2 |
| 10°-20° | 450.9 | 9.9 |
| 20°-30° | 707.3 | 15.5 |
| 30°-40° | 824.8 | 18.1 |
| 40°-50° | 784.8 | 17.2 |
| 50°-60° | 662.5 | 14.6 |
| 60°-70° | 516.2 | 11.3 |
| 70°-80° | 336.6 | 7.4 |
| 80°-90° | 122.5 | 2.7 |
| 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° | 1302.3 | 28.6 |
| 0°-40° | 2127.1 | 46.8 |
| 0°-60° | 3574.3 | 78.6 |
| 0°-90° | 4549.6 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 4549.6 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|------|-------|------|-------|------|------|
| 0° | 1408 | 1408 | 1408 | 1408 | 1408 | |
| 5° | 1426 | 1431 | 1501 | 1536 | 1536 | 135 |
| 15° | 1359 | 1492 | 1640 | 1713 | 1730 | 383 |
| 25° | 1225 | 1426 | 1600 | 1675 | 1695 | 564 |
| 35° | 1028 | 1231 | 1388 | 1437 | 1449 | 641 |
| 45° | 784 | 961 | 1077 | 1089 | 1080 | 605 |
| 55° | 549 | 720 | 798 | 775 | 763 | 494 |
| 65° | 369 | 528 | 580 | 534 | 514 | 367 |
| 75° | 220 | 354 | 360 | 302 | 288 | 232 |
| 85° | 70 | 151 | 128 | 99 | 96 | 77 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P183984

CATALOG NUMBER: 14SR-LD2-45-S-UNV-L840-CD1-U

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|--------|--------|--------|--------|--------|
| 0° | 1407.9 | 1407.9 | 1407.9 | 1407.9 | 1407.9 |
| 2.5° | 1428.3 | 1411.0 | 1437.0 | 1454.4 | 1442.8 |
| 5° | 1425.5 | 1431.3 | 1501.0 | 1535.6 | 1535.6 |
| 7.5° | 1413.7 | 1454.4 | 1550.2 | 1596.6 | 1605.4 |
| 10° | 1399.4 | 1474.7 | 1588.1 | 1649.0 | 1663.6 |
| 12.5° | 1381.9 | 1489.2 | 1619.9 | 1686.7 | 1704.2 |
| 15° | 1358.8 | 1492.2 | 1640.3 | 1712.8 | 1730.3 |
| 17.5° | 1332.4 | 1486.5 | 1646.0 | 1724.5 | 1741.9 |
| 20° | 1300.6 | 1474.7 | 1643.3 | 1721.5 | 1741.9 |
| 22.5° | 1265.7 | 1454.4 | 1625.7 | 1704.2 | 1727.3 |
| 25° | 1225.1 | 1425.5 | 1599.6 | 1675.1 | 1695.4 |
| 27.5° | 1184.4 | 1384.9 | 1562.0 | 1631.5 | 1651.8 |
| 30° | 1135.2 | 1341.2 | 1512.6 | 1579.3 | 1593.8 |
| 32.5° | 1082.8 | 1289.0 | 1454.4 | 1515.3 | 1527.1 |
| 35° | 1027.6 | 1230.8 | 1387.6 | 1437.0 | 1448.6 |
| 37.5° | 966.7 | 1164.1 | 1312.1 | 1355.8 | 1358.8 |
| 40° | 908.7 | 1097.4 | 1233.8 | 1268.7 | 1265.7 |
| 42.5° | 847.7 | 1030.6 | 1155.5 | 1178.6 | 1178.6 |
| 45° | 783.8 | 960.9 | 1077.0 | 1088.6 | 1080.0 |
| 47.5° | 722.8 | 897.1 | 1001.5 | 1004.5 | 995.7 |
| 50° | 661.8 | 833.2 | 932.0 | 923.2 | 911.7 |
| 52.5° | 603.9 | 772.2 | 862.3 | 844.7 | 833.2 |
| 55° | 548.7 | 720.0 | 798.3 | 775.2 | 763.4 |
| 57.5° | 499.3 | 667.8 | 740.3 | 711.2 | 699.7 |
| 60° | 452.8 | 618.4 | 682.2 | 650.3 | 638.7 |
| 62.5° | 409.4 | 572.0 | 630.0 | 592.3 | 574.8 |
| 65° | 368.8 | 528.4 | 580.5 | 534.1 | 513.8 |
| 67.5° | 330.9 | 484.7 | 531.4 | 473.2 | 455.8 |
| 70° | 293.3 | 441.3 | 476.2 | 415.2 | 397.7 |
| 72.5° | 255.4 | 397.7 | 423.7 | 357.0 | 339.7 |
| 75° | 220.5 | 354.2 | 360.0 | 301.8 | 287.5 |
| 77.5° | 182.9 | 316.4 | 304.8 | 249.6 | 235.1 |
| 80° | 145.3 | 267.2 | 243.9 | 197.4 | 188.7 |
| 82.5° | 107.4 | 209.0 | 185.9 | 148.0 | 142.2 |
| 85° | 69.7 | 151.0 | 127.7 | 98.6 | 95.8 |
| 87.5° | 34.9 | 81.3 | 64.0 | 49.4 | 46.4 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)