

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: P183937

Luminaire Tested: **14SR-LD2-45-C-UNV-L830-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P183937
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P34451)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 14SR-LD2-45-C-UNV-L830-CD1-U
Description: METALUX SKYRIDGE EDGELIT LED 1X4 TROFFER

Light Source: EATON LED 3000K
Ballast/Driver: OSRAM ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4339.8 lumens
Efficiency: N/A
Efficacy: 114.5 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 1.42 / 1.41
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

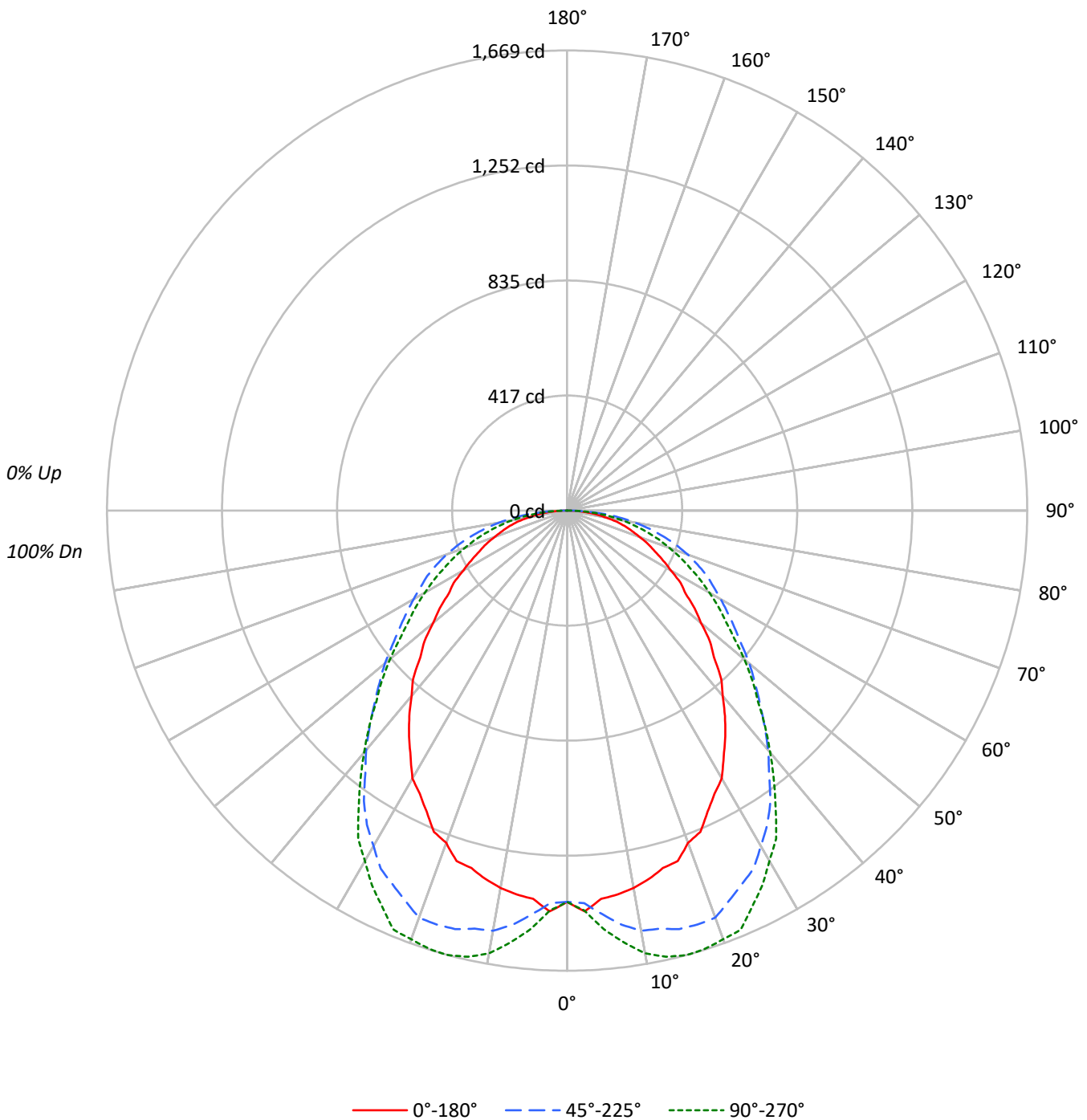
Input Watts (W): 37.9
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P183937

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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 | 103 | 99 | 95 | 106 | 101 | 97 | 93 | 97 | 94 | 91 | 93 | 90 | 88 | 89 | 87 | 85 | 83 |
| 2 | 99 | 90 | 83 | 77 | 96 | 88 | 82 | 77 | 85 | 79 | 75 | 81 | 77 | 73 | 78 | 75 | 71 | 69 |
| 3 | 90 | 79 | 71 | 65 | 87 | 78 | 70 | 64 | 75 | 68 | 63 | 72 | 66 | 62 | 69 | 65 | 61 | 58 |
| 4 | 83 | 70 | 62 | 55 | 80 | 69 | 61 | 55 | 67 | 59 | 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 | 37 | 48 | 41 | 36 | 47 | 41 | 36 | 34 |
| 8 | 61 | 47 | 39 | 33 | 59 | 47 | 39 | 33 | 45 | 38 | 33 | 44 | 37 | 33 | 43 | 37 | 32 | 30 |
| 9 | 57 | 44 | 35 | 30 | 55 | 43 | 35 | 30 | 42 | 35 | 30 | 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° | 3820 | 3820 | 3820 |
| 5° | 3818 | 3971 | 4116 |
| 10° | 3797 | 4228 | 4456 |
| 15° | 3739 | 4377 | 4651 |
| 20° | 3673 | 4499 | 4738 |
| 25° | 3578 | 4444 | 4709 |
| 30° | 3486 | 4364 | 4558 |
| 35° | 3284 | 4223 | 4331 |
| 40° | 3084 | 3983 | 4025 |
| 45° | 2865 | 3760 | 3726 |
| 50° | 2653 | 3613 | 3513 |
| 55° | 2457 | 3476 | 3295 |
| 60° | 2338 | 3460 | 3203 |
| 65° | 2236 | 3562 | 3126 |
| 70° | 2201 | 3652 | 3091 |
| 75° | 2228 | 3744 | 3094 |
| 80° | 2168 | 3874 | 3137 |
| 85° | 2112 | 3952 | 3125 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 143.0 | 3.3 |
| 10°-20° | 439.2 | 10.1 |
| 20°-30° | 676.3 | 15.6 |
| 30°-40° | 774.2 | 17.8 |
| 40°-50° | 731.9 | 16.9 |
| 50°-60° | 621.5 | 14.3 |
| 60°-70° | 494.3 | 11.4 |
| 70°-80° | 335.1 | 7.7 |
| 80°-90° | 124.3 | 2.9 |
| 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° | 1258.6 | 29.0 |
| 0°-40° | 2032.8 | 46.8 |
| 0°-60° | 3386.2 | 78.0 |
| 0°-90° | 4339.8 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 4339.8 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|------|-------|------|-------|------|------|
| 0° | 1419 | 1419 | 1419 | 1419 | 1419 | |
| 5° | 1414 | 1443 | 1470 | 1521 | 1524 | 135 |
| 15° | 1342 | 1485 | 1571 | 1663 | 1669 | 380 |
| 25° | 1205 | 1408 | 1497 | 1577 | 1586 | 556 |
| 35° | 1000 | 1202 | 1286 | 1321 | 1318 | 625 |
| 45° | 753 | 931 | 988 | 1000 | 979 | 586 |
| 55° | 524 | 681 | 741 | 723 | 702 | 476 |
| 65° | 351 | 503 | 559 | 512 | 491 | 351 |
| 75° | 214 | 345 | 360 | 310 | 298 | 225 |
| 85° | 68 | 146 | 128 | 104 | 101 | 76 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P183937

CATALOG NUMBER: 14SR-LD2-45-C-UNV-L830-CD1-U

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|--------|--------|--------|--------|--------|
| 0° | 1419.4 | 1419.4 | 1419.4 | 1419.4 | 1419.4 |
| 2.5° | 1455.1 | 1434.3 | 1425.4 | 1455.1 | 1452.2 |
| 5° | 1413.5 | 1443.2 | 1470.0 | 1520.6 | 1523.6 |
| 7.5° | 1404.5 | 1473.0 | 1514.7 | 1577.1 | 1580.1 |
| 10° | 1389.7 | 1478.9 | 1547.4 | 1621.8 | 1630.7 |
| 12.5° | 1368.8 | 1484.9 | 1553.3 | 1645.6 | 1657.5 |
| 15° | 1342.1 | 1484.9 | 1571.2 | 1663.4 | 1669.4 |
| 17.5° | 1333.1 | 1484.9 | 1574.2 | 1654.5 | 1666.4 |
| 20° | 1282.5 | 1470.0 | 1571.2 | 1642.6 | 1654.5 |
| 22.5° | 1261.7 | 1443.2 | 1532.5 | 1618.8 | 1645.6 |
| 25° | 1205.2 | 1407.5 | 1496.8 | 1577.1 | 1586.1 |
| 27.5° | 1157.6 | 1368.8 | 1464.1 | 1532.5 | 1532.5 |
| 30° | 1121.9 | 1321.2 | 1404.5 | 1470.0 | 1467.0 |
| 32.5° | 1056.4 | 1255.8 | 1351.0 | 1401.6 | 1410.5 |
| 35° | 999.8 | 1202.2 | 1285.5 | 1321.2 | 1318.3 |
| 37.5° | 940.3 | 1133.8 | 1202.2 | 1243.9 | 1232.0 |
| 40° | 877.8 | 1065.3 | 1133.8 | 1160.5 | 1145.7 |
| 42.5° | 827.3 | 993.9 | 1059.4 | 1077.2 | 1062.3 |
| 45° | 752.9 | 931.4 | 987.9 | 999.8 | 979.0 |
| 47.5° | 702.3 | 863.0 | 922.5 | 922.5 | 910.6 |
| 50° | 633.8 | 797.5 | 863.0 | 845.1 | 839.2 |
| 52.5° | 583.2 | 741.0 | 797.5 | 782.6 | 764.8 |
| 55° | 523.7 | 681.4 | 741.0 | 723.1 | 702.3 |
| 57.5° | 488.0 | 633.8 | 690.4 | 669.5 | 651.7 |
| 60° | 434.5 | 586.2 | 642.8 | 616.0 | 595.1 |
| 62.5° | 392.8 | 544.6 | 598.1 | 565.4 | 544.6 |
| 65° | 351.1 | 502.9 | 559.4 | 511.8 | 491.0 |
| 67.5° | 318.4 | 464.2 | 511.8 | 461.2 | 443.4 |
| 70° | 279.7 | 419.6 | 464.2 | 410.7 | 392.8 |
| 72.5° | 247.0 | 383.9 | 413.6 | 360.1 | 348.2 |
| 75° | 214.3 | 345.2 | 360.1 | 309.5 | 297.6 |
| 77.5° | 181.5 | 306.5 | 306.5 | 261.9 | 250.0 |
| 80° | 139.9 | 261.9 | 250.0 | 211.3 | 202.4 |
| 82.5° | 107.1 | 208.3 | 190.4 | 157.7 | 151.8 |
| 85° | 68.4 | 145.8 | 128.0 | 104.2 | 101.2 |
| 87.5° | 32.7 | 77.4 | 62.5 | 50.6 | 47.6 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)