

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: P#

Luminaire Tested: **4RSRK-100-HE-L850**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P#
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1811-041-2)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 4RSRK-100-HE-L850
Description: 4ft RSRK, 1000 LUMEN PER FOOT 80CRI 5000K CCT WITH NO LENS
Light Source: -
Ballast/Driver: -

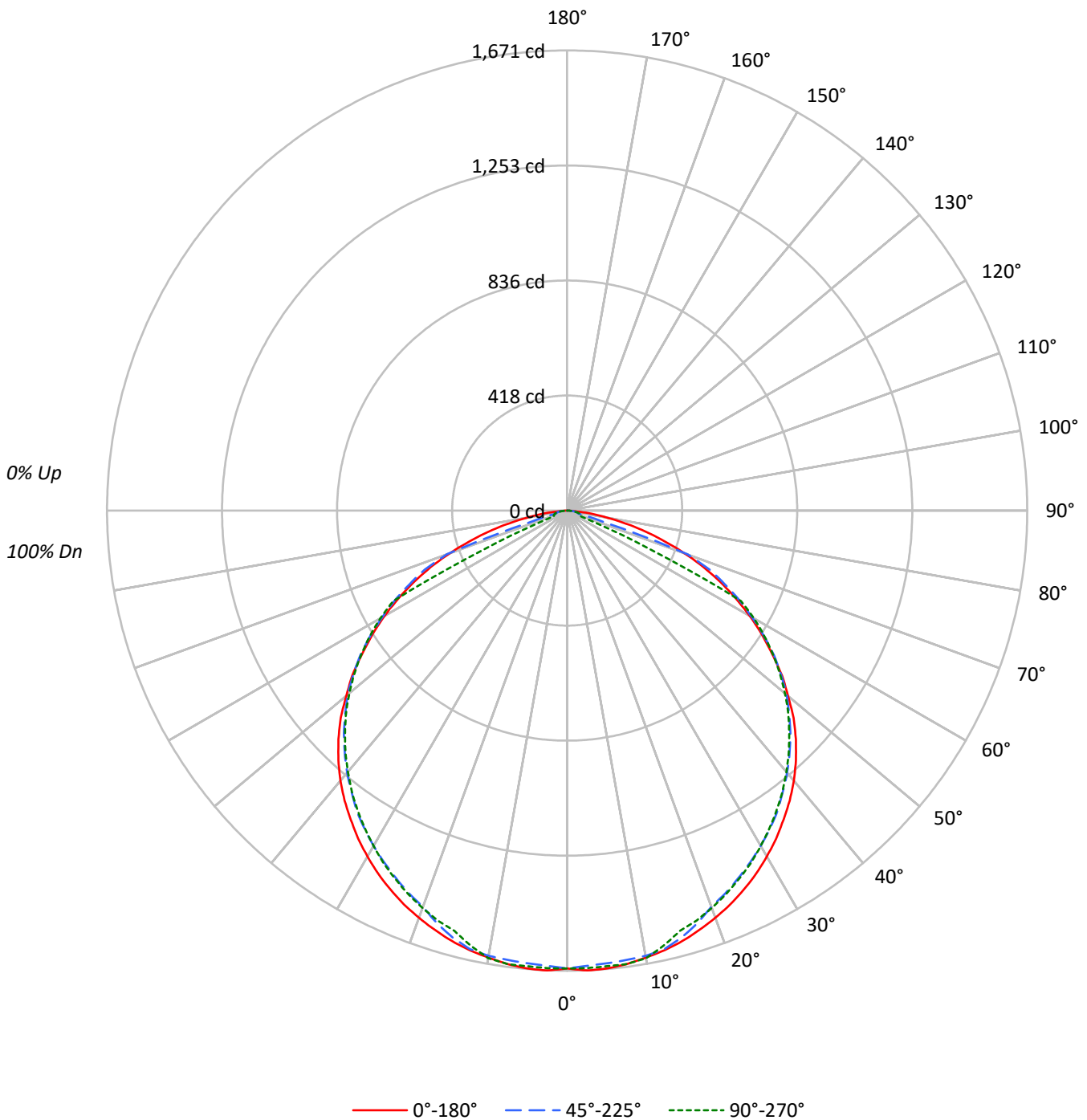
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4577.8 lumens
Efficiency: N/A
Efficacy: 159.0 lumens/watt
Spacing Criteria (0/90/45): 1.29 / 1.26 / 1.4
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 28.8
Input Voltage (V): NR
Input Current (Ain): 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: P#
CATALOG NUMBER: 4RSRK-100-HE-L850

Luminous Intensity Polar Plot





TEST NUMBER: P#

CATALOG NUMBER: 4RSRK-100-HE-L850

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 | 110 | 105 | 102 | 98 | 107 | 103 | 100 | 96 | 99 | 96 | 93 | 95 | 93 | 91 | 92 | 90 | 88 | 86 |
| 2 | 100 | 93 | 86 | 81 | 98 | 91 | 85 | 80 | 87 | 82 | 78 | 84 | 80 | 76 | 81 | 78 | 74 | 72 |
| 3 | 92 | 81 | 74 | 67 | 89 | 80 | 73 | 67 | 77 | 71 | 66 | 74 | 69 | 65 | 72 | 67 | 63 | 61 |
| 4 | 84 | 72 | 64 | 57 | 82 | 71 | 63 | 57 | 68 | 62 | 56 | 66 | 60 | 55 | 64 | 59 | 55 | 52 |
| 5 | 77 | 65 | 56 | 49 | 75 | 63 | 55 | 49 | 61 | 54 | 48 | 59 | 53 | 48 | 58 | 52 | 47 | 45 |
| 6 | 71 | 58 | 49 | 43 | 69 | 57 | 49 | 43 | 55 | 48 | 42 | 54 | 47 | 42 | 52 | 46 | 42 | 40 |
| 7 | 66 | 53 | 44 | 38 | 64 | 52 | 44 | 38 | 50 | 43 | 37 | 49 | 42 | 37 | 47 | 41 | 37 | 35 |
| 8 | 61 | 48 | 39 | 34 | 60 | 47 | 39 | 34 | 46 | 39 | 33 | 45 | 38 | 33 | 43 | 37 | 33 | 31 |
| 9 | 57 | 44 | 36 | 30 | 56 | 43 | 36 | 30 | 42 | 35 | 30 | 41 | 35 | 30 | 40 | 34 | 30 | 28 |
| 10 | 54 | 41 | 33 | 27 | 52 | 40 | 32 | 27 | 39 | 32 | 27 | 38 | 32 | 27 | 37 | 31 | 27 | 25 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|------|------|------|
| 0° | 4475 | 4475 | 4475 |
| 5° | 4509 | 4457 | 4486 |
| 10° | 4503 | 4486 | 4509 |
| 15° | 4508 | 4473 | 4402 |
| 20° | 4507 | 4385 | 4397 |
| 25° | 4509 | 4370 | 4382 |
| 30° | 4507 | 4369 | 4369 |
| 35° | 4500 | 4374 | 4360 |
| 40° | 4499 | 4364 | 4350 |
| 45° | 4469 | 4364 | 4340 |
| 50° | 4383 | 4356 | 4321 |
| 55° | 4265 | 4304 | 4284 |
| 60° | 4126 | 4172 | 4217 |
| 65° | 3908 | 4016 | 2123 |
| 70° | 3576 | 3659 | 401 |
| 75° | 3069 | 442 | 486 |
| 80° | 2304 | 559 | 559 |
| 85° | 1179 | 590 | 525 |



TEST NUMBER: P#

CATALOG NUMBER: 4RSRK-100-HE-L850

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 158.0 | 3.5 |
| 10°-20° | 452.6 | 9.9 |
| 20°-30° | 688.0 | 15.0 |
| 30°-40° | 838.1 | 18.3 |
| 40°-50° | 886.8 | 19.4 |
| 50°-60° | 813.4 | 17.8 |
| 60°-70° | 548.7 | 12.0 |
| 70°-80° | 165.8 | 3.6 |
| 80°-90° | 26.5 | 0.6 |
| 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° | 1298.6 | 28.4 |
| 0°-40° | 2136.6 | 46.7 |
| 0°-60° | 3836.8 | 83.8 |
| 0°-90° | 4577.8 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 4577.8 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|------|-------|------|-------|------|------|
| 0° | 1663 | 1663 | 1663 | 1663 | 1663 | |
| 5° | 1669 | 1656 | 1650 | 1665 | 1661 | 159 |
| 15° | 1618 | 1610 | 1606 | 1593 | 1580 | 457 |
| 25° | 1518 | 1516 | 1472 | 1487 | 1476 | 700 |
| 35° | 1370 | 1340 | 1332 | 1336 | 1327 | 858 |
| 45° | 1174 | 1147 | 1147 | 1149 | 1140 | 904 |
| 55° | 909 | 896 | 917 | 917 | 913 | 814 |
| 65° | 614 | 605 | 631 | 639 | 333 | 606 |
| 75° | 295 | 297 | 42 | 47 | 47 | 313 |
| 85° | 38 | 19 | 19 | 17 | 17 | 58 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P#

CATALOG NUMBER: 4RSRK-100-HE-L850

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|--------|--------|--------|--------|--------|
| 0° | 1662.9 | 1662.9 | 1662.9 | 1662.9 | 1662.9 |
| 2.5° | 1671.4 | 1658.6 | 1654.4 | 1665.0 | 1662.9 |
| 5° | 1669.2 | 1656.5 | 1650.1 | 1665.0 | 1660.8 |
| 7.5° | 1660.8 | 1648.0 | 1645.9 | 1662.9 | 1660.8 |
| 10° | 1648.0 | 1639.5 | 1641.6 | 1656.5 | 1650.1 |
| 12.5° | 1635.3 | 1626.8 | 1631.0 | 1626.8 | 1618.3 |
| 15° | 1618.3 | 1609.8 | 1605.5 | 1592.8 | 1580.1 |
| 17.5° | 1597.0 | 1592.8 | 1571.6 | 1567.3 | 1561.0 |
| 20° | 1573.7 | 1573.7 | 1531.2 | 1544.0 | 1535.5 |
| 22.5° | 1548.2 | 1548.2 | 1503.6 | 1516.3 | 1507.8 |
| 25° | 1518.5 | 1516.3 | 1471.7 | 1486.6 | 1476.0 |
| 27.5° | 1486.6 | 1476.0 | 1439.9 | 1452.6 | 1444.1 |
| 30° | 1450.5 | 1431.4 | 1405.9 | 1414.4 | 1405.9 |
| 32.5° | 1412.3 | 1384.7 | 1369.8 | 1376.2 | 1367.7 |
| 35° | 1369.8 | 1340.1 | 1331.6 | 1335.8 | 1327.3 |
| 37.5° | 1327.3 | 1295.5 | 1287.0 | 1293.3 | 1284.8 |
| 40° | 1280.6 | 1250.8 | 1242.4 | 1246.7 | 1238.2 |
| 42.5° | 1229.7 | 1204.2 | 1195.7 | 1197.8 | 1191.4 |
| 45° | 1174.4 | 1146.8 | 1146.8 | 1148.9 | 1140.4 |
| 47.5° | 1114.9 | 1091.6 | 1093.7 | 1095.8 | 1089.4 |
| 50° | 1047.0 | 1030.0 | 1040.6 | 1042.8 | 1032.1 |
| 52.5° | 983.3 | 966.3 | 979.0 | 983.3 | 974.8 |
| 55° | 909.0 | 896.2 | 917.4 | 917.4 | 913.2 |
| 57.5° | 838.9 | 826.1 | 847.4 | 855.9 | 849.5 |
| 60° | 766.6 | 753.9 | 775.1 | 790.0 | 783.6 |
| 62.5° | 690.2 | 679.6 | 705.1 | 724.2 | 711.5 |
| 65° | 613.7 | 605.2 | 630.7 | 639.2 | 333.4 |
| 67.5° | 535.2 | 528.8 | 558.6 | 201.8 | 53.1 |
| 70° | 454.5 | 448.1 | 465.1 | 51.0 | 51.0 |
| 72.5° | 371.7 | 373.8 | 148.7 | 48.9 | 48.9 |
| 75° | 295.2 | 297.3 | 42.5 | 46.7 | 46.7 |
| 77.5° | 218.8 | 223.0 | 40.4 | 42.5 | 42.5 |
| 80° | 148.7 | 108.3 | 36.1 | 36.1 | 36.1 |
| 82.5° | 89.2 | 25.5 | 27.6 | 27.6 | 25.5 |
| 85° | 38.2 | 19.1 | 19.1 | 17.0 | 17.0 |
| 87.5° | 12.7 | 8.5 | 8.5 | 6.4 | 6.4 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)