

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-200-HE-L930**

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-200-HE-L930
Description: 4ft RSRK, 2000 LUMEN PER FOOT 90CRI 3000K CCT WITH NO LENS
Light Source: -
Ballast/Driver: -

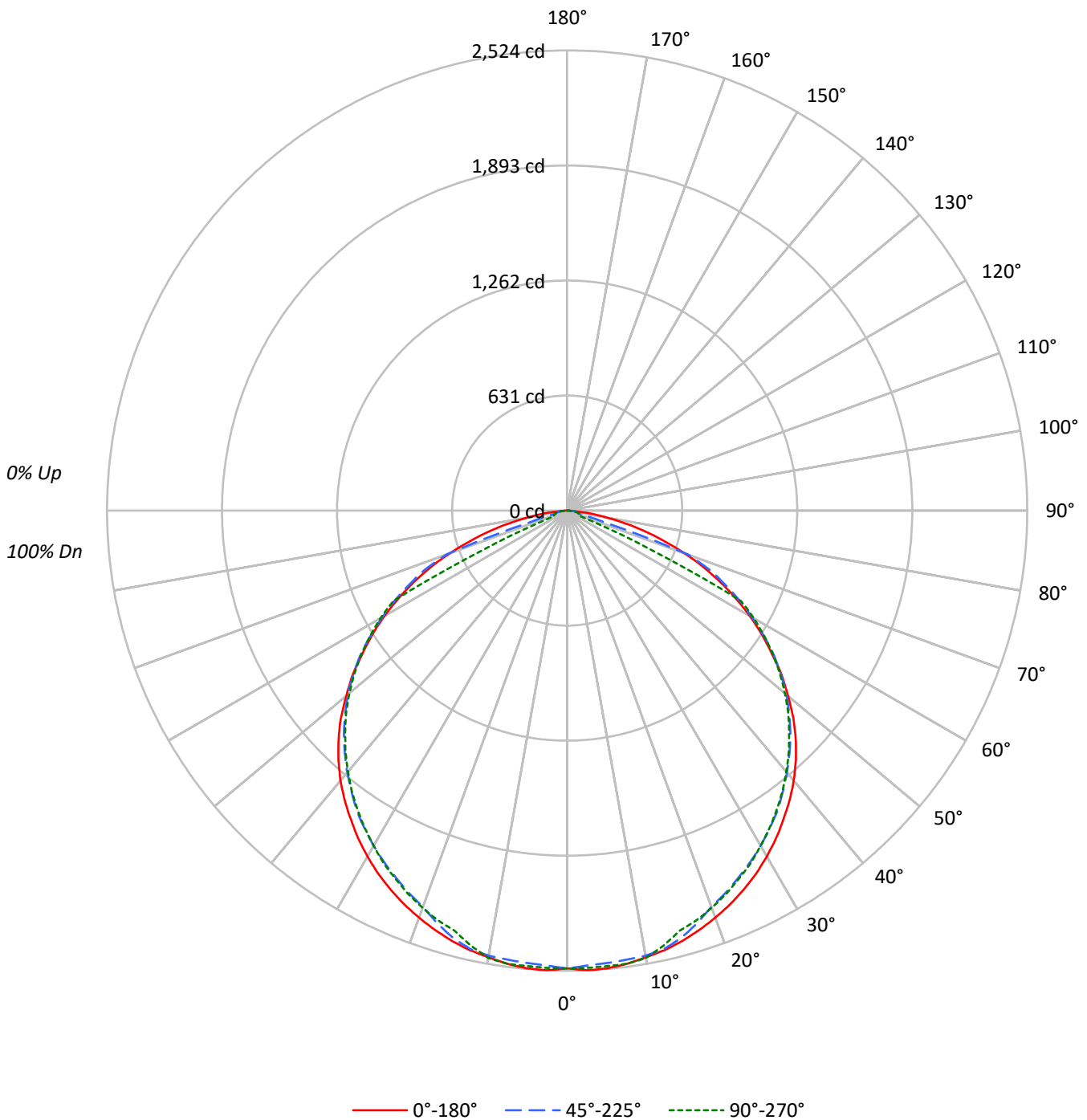
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6912.2 lumens
Efficiency: N/A
Efficacy: 112.9 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): 61.2
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

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CATALOG NUMBER: 4RSRK-200-HE-L930

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 | 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° | 6757 | 6757 | 6757 |
| 5° | 6808 | 6730 | 6774 |
| 10° | 6800 | 6773 | 6808 |
| 15° | 6807 | 6754 | 6647 |
| 20° | 6804 | 6621 | 6639 |
| 25° | 6808 | 6598 | 6617 |
| 30° | 6806 | 6596 | 6596 |
| 35° | 6795 | 6605 | 6584 |
| 40° | 6793 | 6590 | 6567 |
| 45° | 6749 | 6590 | 6553 |
| 50° | 6618 | 6578 | 6524 |
| 55° | 6439 | 6499 | 6469 |
| 60° | 6230 | 6299 | 6368 |
| 65° | 5901 | 6064 | 3205 |
| 70° | 5399 | 5526 | 606 |
| 75° | 4635 | 666 | 733 |
| 80° | 3479 | 845 | 845 |
| 85° | 1782 | 889 | 794 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 238.5 | 3.5 |
| 10°-20° | 683.3 | 9.9 |
| 20°-30° | 1038.8 | 15.0 |
| 30°-40° | 1265.4 | 18.3 |
| 40°-50° | 1339.0 | 19.4 |
| 50°-60° | 1228.2 | 17.8 |
| 60°-70° | 828.4 | 12.0 |
| 70°-80° | 250.4 | 3.6 |
| 80°-90° | 40.0 | 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° | 1960.7 | 28.4 |
| 0°-40° | 3226.1 | 46.7 |
| 0°-60° | 5793.3 | 83.8 |
| 0°-90° | 6912.2 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 6912.2 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|------|-------|------|-------|------|------|
| 0° | 2511 | 2511 | 2511 | 2511 | 2511 | |
| 5° | 2520 | 2501 | 2492 | 2514 | 2508 | 239 |
| 15° | 2444 | 2431 | 2424 | 2405 | 2386 | 690 |
| 25° | 2293 | 2290 | 2222 | 2245 | 2229 | 1057 |
| 35° | 2068 | 2023 | 2011 | 2017 | 2004 | 1295 |
| 45° | 1773 | 1732 | 1732 | 1735 | 1722 | 1365 |
| 55° | 1372 | 1353 | 1385 | 1385 | 1379 | 1228 |
| 65° | 927 | 914 | 952 | 965 | 503 | 915 |
| 75° | 446 | 449 | 64 | 70 | 70 | 472 |
| 85° | 58 | 29 | 29 | 26 | 26 | 88 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P#

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CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|--------|--------|--------|--------|--------|
| 0° | 2510.9 | 2510.9 | 2510.9 | 2510.9 | 2510.9 |
| 2.5° | 2523.7 | 2504.4 | 2498.0 | 2514.0 | 2510.9 |
| 5° | 2520.4 | 2501.2 | 2491.5 | 2514.0 | 2507.6 |
| 7.5° | 2507.6 | 2488.4 | 2485.2 | 2510.9 | 2507.6 |
| 10° | 2488.4 | 2475.6 | 2478.7 | 2501.2 | 2491.5 |
| 12.5° | 2469.1 | 2456.3 | 2462.7 | 2456.3 | 2443.5 |
| 15° | 2443.5 | 2430.7 | 2424.2 | 2405.0 | 2385.8 |
| 17.5° | 2411.4 | 2405.0 | 2372.9 | 2366.5 | 2356.9 |
| 20° | 2376.1 | 2376.1 | 2312.0 | 2331.3 | 2318.5 |
| 22.5° | 2337.6 | 2337.6 | 2270.3 | 2289.6 | 2276.7 |
| 25° | 2292.8 | 2289.6 | 2222.2 | 2244.7 | 2228.7 |
| 27.5° | 2244.7 | 2228.7 | 2174.1 | 2193.4 | 2180.5 |
| 30° | 2190.2 | 2161.3 | 2122.8 | 2135.6 | 2122.8 |
| 32.5° | 2132.4 | 2090.8 | 2068.3 | 2077.9 | 2065.1 |
| 35° | 2068.3 | 2023.4 | 2010.6 | 2017.0 | 2004.1 |
| 37.5° | 2004.1 | 1956.1 | 1943.2 | 1952.8 | 1940.0 |
| 40° | 1933.7 | 1888.7 | 1875.9 | 1882.4 | 1869.5 |
| 42.5° | 1856.7 | 1818.2 | 1805.4 | 1808.6 | 1798.9 |
| 45° | 1773.3 | 1731.6 | 1731.6 | 1734.8 | 1721.9 |
| 47.5° | 1683.5 | 1648.2 | 1651.5 | 1654.6 | 1645.0 |
| 50° | 1580.9 | 1555.2 | 1571.3 | 1574.5 | 1558.4 |
| 52.5° | 1484.7 | 1459.1 | 1478.2 | 1484.7 | 1471.9 |
| 55° | 1372.5 | 1353.2 | 1385.3 | 1385.3 | 1378.9 |
| 57.5° | 1266.7 | 1247.4 | 1279.5 | 1292.3 | 1282.7 |
| 60° | 1157.6 | 1138.4 | 1170.4 | 1192.9 | 1183.2 |
| 62.5° | 1042.1 | 1026.1 | 1064.6 | 1093.4 | 1074.3 |
| 65° | 926.7 | 913.9 | 952.3 | 965.2 | 503.4 |
| 67.5° | 808.1 | 798.4 | 843.4 | 304.7 | 80.1 |
| 70° | 686.2 | 676.6 | 702.3 | 77.0 | 77.0 |
| 72.5° | 561.2 | 564.4 | 224.5 | 73.8 | 73.8 |
| 75° | 445.8 | 448.9 | 64.1 | 70.5 | 70.5 |
| 77.5° | 330.3 | 336.7 | 61.0 | 64.1 | 64.1 |
| 80° | 224.5 | 163.6 | 54.5 | 54.5 | 54.5 |
| 82.5° | 134.7 | 38.5 | 41.6 | 41.6 | 38.5 |
| 85° | 57.7 | 28.8 | 28.8 | 25.7 | 25.7 |
| 87.5° | 19.2 | 12.8 | 12.8 | 9.7 | 9.7 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)