

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-TS-200-HE-L940**

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 (G3-1810-975-5)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 4RSRK-TS-200-HE-L940
Description: 4ft RSRK, 2000 LUMEN PER FOOT 90CRI 4000K CCT WITH TRILOBE SMOOTH LENS
Light Source: -
Ballast/Driver: -

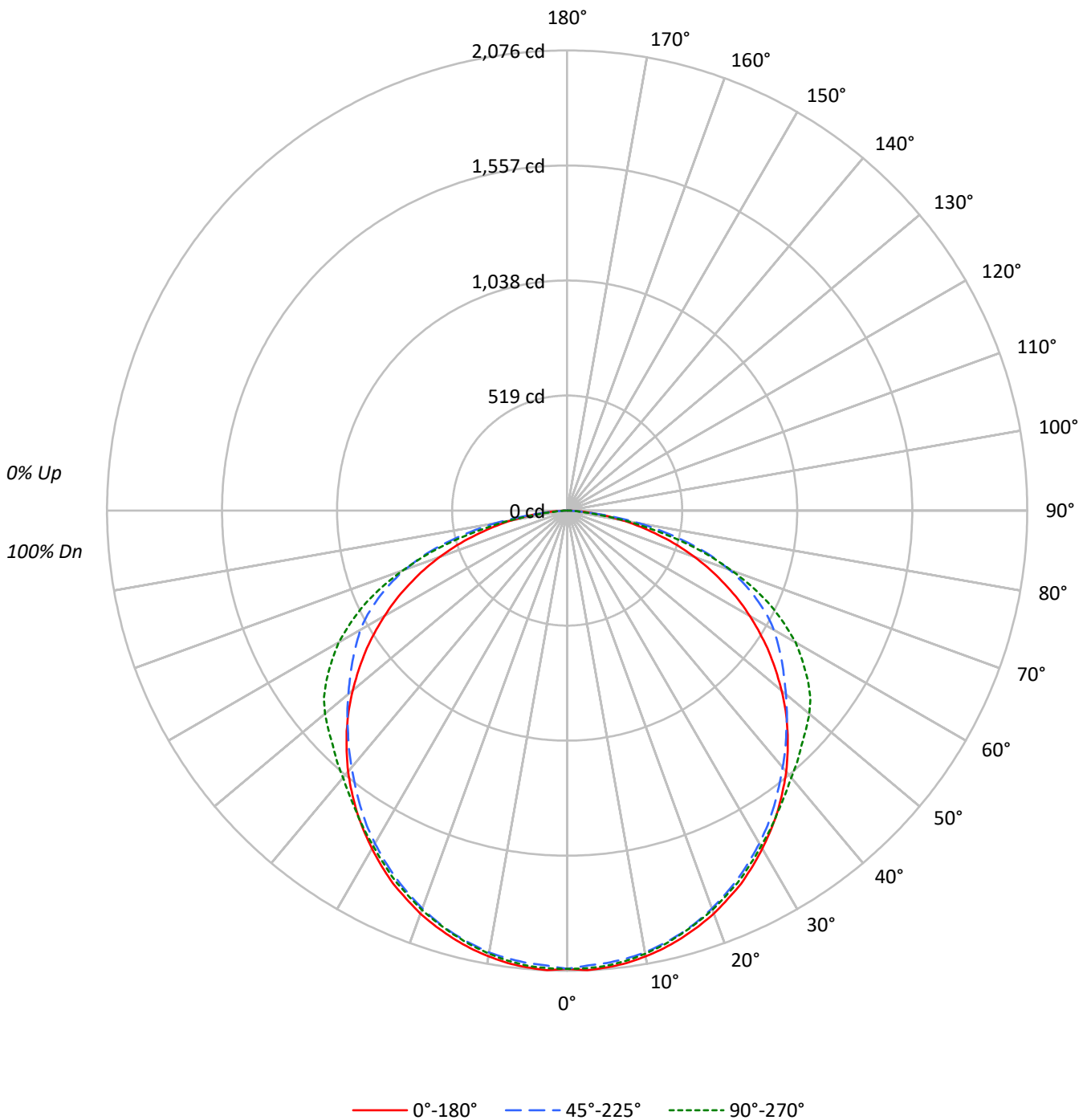
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6366.0 lumens
Efficiency: N/A
Efficacy: 104.0 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.26 / 1.39
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

TEST NUMBER: P#
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Luminous Intensity Polar Plot





TEST NUMBER: P#

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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 | 105 | 101 | 97 | 93 | 97 | 93 | 90 | | 93 | 90 | 87 | | 89 | 87 | 85 | 83 |
| 2 | 98 | 89 | 82 | 76 | 95 | 87 | 81 | 75 | 84 | 78 | 73 | | 80 | 76 | 72 | | 77 | 73 | 70 | 68 |
| 3 | 89 | 78 | 69 | 62 | 86 | 76 | 68 | 62 | 73 | 66 | 61 | | 70 | 65 | 60 | | 68 | 63 | 59 | 56 |
| 4 | 81 | 69 | 59 | 52 | 79 | 67 | 59 | 52 | 65 | 57 | 51 | | 62 | 56 | 51 | | 60 | 54 | 50 | 48 |
| 5 | 74 | 61 | 52 | 45 | 72 | 60 | 51 | 45 | 58 | 50 | 44 | | 56 | 49 | 44 | | 54 | 48 | 43 | 41 |
| 6 | 69 | 55 | 46 | 39 | 67 | 54 | 45 | 39 | 52 | 44 | 38 | | 50 | 43 | 38 | | 49 | 42 | 38 | 36 |
| 7 | 63 | 50 | 41 | 34 | 62 | 49 | 40 | 34 | 47 | 39 | 34 | | 46 | 39 | 34 | | 44 | 38 | 33 | 31 |
| 8 | 59 | 45 | 36 | 30 | 57 | 44 | 36 | 30 | 43 | 36 | 30 | | 42 | 35 | 30 | | 41 | 34 | 30 | 28 |
| 9 | 55 | 41 | 33 | 27 | 54 | 41 | 33 | 27 | 40 | 32 | 27 | | 39 | 32 | 27 | | 37 | 31 | 27 | 25 |
| 10 | 52 | 38 | 30 | 25 | 50 | 38 | 30 | 25 | 37 | 29 | 25 | | 36 | 29 | 24 | | 35 | 29 | 24 | 22 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|------|------|------|
| 0° | 5564 | 5564 | 5564 |
| 5° | 5588 | 5534 | 5567 |
| 10° | 5580 | 5531 | 5546 |
| 15° | 5562 | 5506 | 5515 |
| 20° | 5541 | 5471 | 5490 |
| 25° | 5513 | 5431 | 5464 |
| 30° | 5472 | 5389 | 5434 |
| 35° | 5441 | 5345 | 5448 |
| 40° | 5403 | 5312 | 5524 |
| 45° | 5352 | 5323 | 5692 |
| 50° | 5285 | 5393 | 5972 |
| 55° | 5217 | 5546 | 6211 |
| 60° | 5126 | 5799 | 6405 |
| 65° | 5000 | 5994 | 6455 |
| 70° | 4809 | 6125 | 6204 |
| 75° | 4429 | 5925 | 5543 |
| 80° | 3924 | 5098 | 4252 |
| 85° | 2825 | 2581 | 1686 |



TEST NUMBER: P#

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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 195.8 | 3.1 |
| 10°-20° | 560.4 | 8.8 |
| 20°-30° | 848.5 | 13.3 |
| 30°-40° | 1029.1 | 16.2 |
| 40°-50° | 1100.9 | 17.3 |
| 50°-60° | 1067.1 | 16.8 |
| 60°-70° | 893.7 | 14.0 |
| 70°-80° | 549.2 | 8.6 |
| 80°-90° | 121.3 | 1.9 |
| 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° | 1604.7 | 25.2 |
| 0°-40° | 2633.8 | 41.4 |
| 0°-60° | 4801.9 | 75.4 |
| 0°-90° | 6366.0 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 6366.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|------|-------|------|-------|------|------|
| 0° | 2068 | 2068 | 2068 | 2068 | 2068 | |
| 5° | 2069 | 2064 | 2049 | 2062 | 2061 | 197 |
| 15° | 1996 | 1992 | 1976 | 1985 | 1980 | 564 |
| 25° | 1857 | 1846 | 1829 | 1841 | 1840 | 855 |
| 35° | 1656 | 1635 | 1627 | 1655 | 1658 | 1036 |
| 45° | 1406 | 1376 | 1399 | 1470 | 1496 | 1084 |
| 55° | 1112 | 1082 | 1182 | 1299 | 1324 | 993 |
| 65° | 785 | 781 | 941 | 1005 | 1014 | 776 |
| 75° | 426 | 497 | 570 | 545 | 533 | 453 |
| 85° | 92 | 123 | 84 | 58 | 55 | 115 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P#

CATALOG NUMBER: 4RSRK-TS-200-HE-L940

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|--------|--------|--------|--------|--------|
| 0° | 2067.7 | 2067.7 | 2067.7 | 2067.7 | 2067.7 |
| 2.5° | 2075.5 | 2070.0 | 2054.3 | 2067.7 | 2066.6 |
| 5° | 2068.8 | 2064.4 | 2048.8 | 2062.1 | 2061.0 |
| 7.5° | 2058.8 | 2054.3 | 2038.7 | 2052.1 | 2048.8 |
| 10° | 2042.1 | 2038.7 | 2024.2 | 2034.3 | 2029.8 |
| 12.5° | 2022.0 | 2018.7 | 2001.9 | 2013.1 | 2007.5 |
| 15° | 1996.3 | 1991.9 | 1976.3 | 1985.2 | 1979.6 |
| 17.5° | 1967.4 | 1961.8 | 1946.2 | 1955.1 | 1949.5 |
| 20° | 1935.0 | 1927.2 | 1910.5 | 1922.7 | 1917.2 |
| 22.5° | 1896.0 | 1890.4 | 1870.3 | 1883.7 | 1878.1 |
| 25° | 1856.9 | 1845.8 | 1829.1 | 1841.3 | 1840.2 |
| 27.5° | 1810.1 | 1798.9 | 1782.2 | 1796.7 | 1794.5 |
| 30° | 1761.0 | 1748.8 | 1734.3 | 1748.8 | 1748.8 |
| 32.5° | 1709.7 | 1694.1 | 1683.0 | 1699.7 | 1705.3 |
| 35° | 1656.2 | 1635.0 | 1627.2 | 1655.1 | 1658.4 |
| 37.5° | 1597.1 | 1575.9 | 1569.2 | 1606.0 | 1614.9 |
| 40° | 1538.0 | 1511.2 | 1512.3 | 1559.2 | 1572.5 |
| 42.5° | 1472.2 | 1445.4 | 1457.7 | 1512.3 | 1536.9 |
| 45° | 1406.4 | 1376.3 | 1398.6 | 1469.9 | 1495.6 |
| 47.5° | 1337.2 | 1308.2 | 1345.0 | 1428.7 | 1461.0 |
| 50° | 1262.5 | 1233.5 | 1288.1 | 1389.6 | 1426.4 |
| 52.5° | 1186.7 | 1156.5 | 1233.5 | 1349.5 | 1382.9 |
| 55° | 1111.9 | 1081.8 | 1182.2 | 1299.3 | 1323.8 |
| 57.5° | 1031.6 | 1006.0 | 1128.7 | 1233.5 | 1258.0 |
| 60° | 952.4 | 930.1 | 1077.4 | 1166.6 | 1190.0 |
| 62.5° | 871.0 | 854.3 | 1014.9 | 1089.6 | 1103.0 |
| 65° | 785.2 | 780.7 | 941.3 | 1004.9 | 1013.8 |
| 67.5° | 699.3 | 710.4 | 865.5 | 906.7 | 907.8 |
| 70° | 611.2 | 641.3 | 778.5 | 796.3 | 788.5 |
| 72.5° | 522.0 | 574.4 | 682.6 | 673.6 | 666.9 |
| 75° | 426.0 | 497.4 | 569.9 | 545.4 | 533.1 |
| 77.5° | 339.0 | 419.3 | 449.5 | 414.9 | 395.9 |
| 80° | 253.2 | 331.2 | 329.0 | 284.4 | 274.4 |
| 82.5° | 170.6 | 230.9 | 197.4 | 160.6 | 140.5 |
| 85° | 91.5 | 122.7 | 83.6 | 58.0 | 54.6 |
| 87.5° | 34.6 | 29.0 | 22.3 | 20.1 | 20.1 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)