

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-150-HE-L830**

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-150-HE-L830
Description: 4ft RSRK, 1500 LUMEN PER FOOT 80CRI 3000K CCT WITH TRILOBE SMOOTH LENS
Light Source: -
Ballast/Driver: -

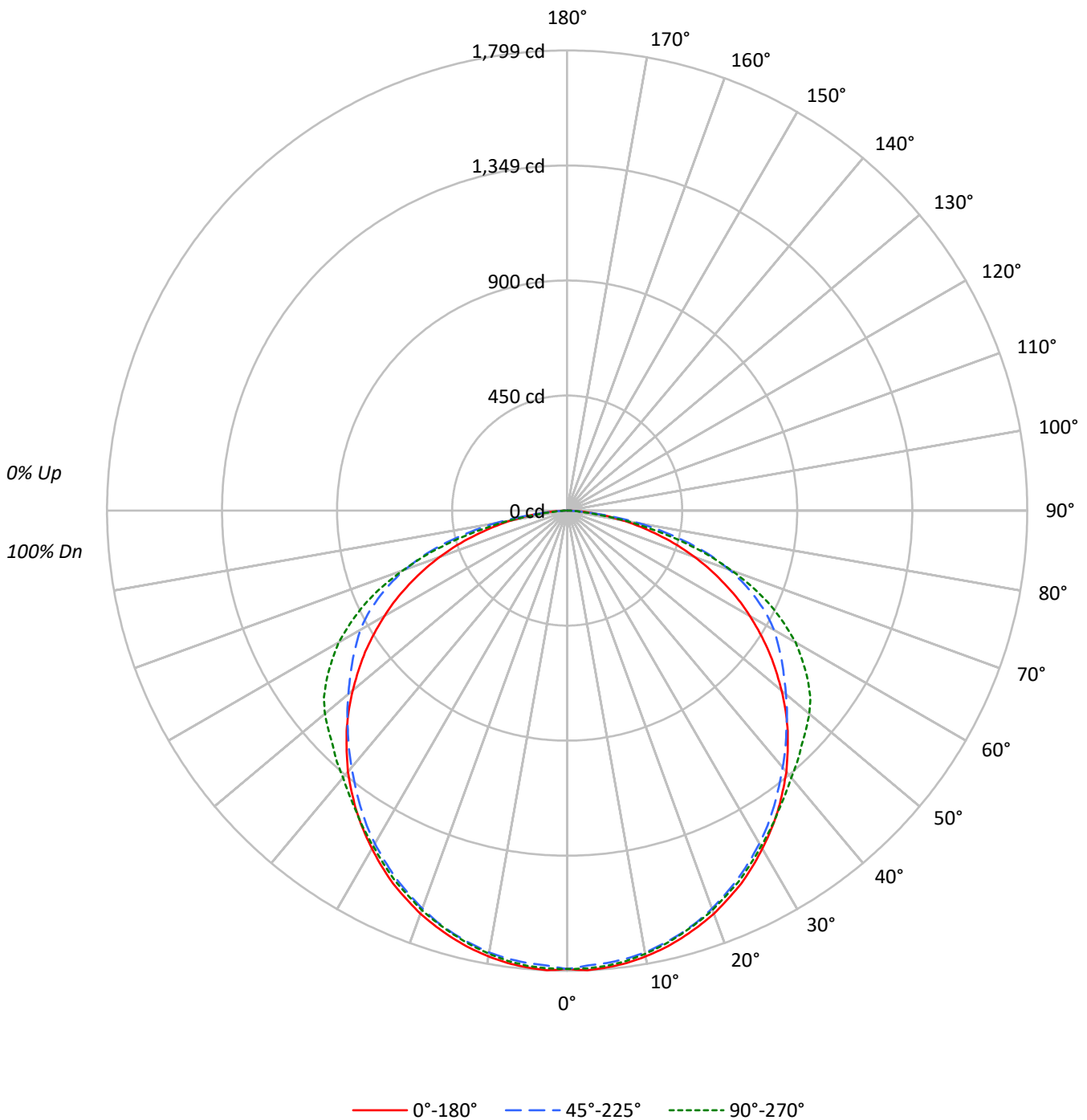
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5517.7 lumens
Efficiency: N/A
Efficacy: 124.8 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): 44.2
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#
CATALOG NUMBER: 4RSRK-TS-150-HE-L830

Luminous Intensity Polar Plot





TEST NUMBER: P#

CATALOG NUMBER: 4RSRK-TS-150-HE-L830

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 | 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 | | | | | 100 | | | |
| 1 | 108 | 103 | 99 | 95 | 105 | 101 | 97 | 93 | 97 | 93 | 90 | 93 | 90 | 87 | 89 | 87 | 85 | 83 | | | | | 83 | | | |
| 2 | 98 | 89 | 82 | 76 | 95 | 87 | 81 | 75 | 84 | 78 | 73 | 80 | 76 | 72 | 77 | 73 | 70 | 68 | | | | | 68 | | | |
| 3 | 89 | 78 | 69 | 62 | 86 | 76 | 68 | 62 | 73 | 66 | 61 | 70 | 65 | 60 | 68 | 63 | 59 | 56 | | | | | 56 | | | |
| 4 | 81 | 69 | 59 | 52 | 79 | 67 | 59 | 52 | 65 | 57 | 51 | 62 | 56 | 51 | 60 | 54 | 50 | 48 | | | | | 48 | | | |
| 5 | 74 | 61 | 52 | 45 | 72 | 60 | 51 | 45 | 58 | 50 | 44 | 56 | 49 | 44 | 54 | 48 | 43 | 41 | | | | | 41 | | | |
| 6 | 69 | 55 | 46 | 39 | 67 | 54 | 45 | 39 | 52 | 44 | 38 | 50 | 43 | 38 | 49 | 42 | 38 | 36 | | | | | 36 | | | |
| 7 | 63 | 50 | 41 | 34 | 62 | 49 | 40 | 34 | 47 | 39 | 34 | 46 | 39 | 34 | 44 | 38 | 33 | 31 | | | | | 31 | | | |
| 8 | 59 | 45 | 36 | 30 | 57 | 44 | 36 | 30 | 43 | 36 | 30 | 42 | 35 | 30 | 41 | 34 | 30 | 28 | | | | | 28 | | | |
| 9 | 55 | 41 | 33 | 27 | 54 | 41 | 33 | 27 | 40 | 32 | 27 | 39 | 32 | 27 | 37 | 31 | 27 | 25 | | | | | 25 | | | |
| 10 | 52 | 38 | 30 | 25 | 50 | 38 | 30 | 25 | 37 | 29 | 25 | 36 | 29 | 24 | 35 | 29 | 24 | 22 | | | | | 22 | | | |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|------|------|------|
| 0° | 4823 | 4823 | 4823 |
| 5° | 4844 | 4797 | 4826 |
| 10° | 4836 | 4794 | 4807 |
| 15° | 4820 | 4772 | 4780 |
| 20° | 4803 | 4742 | 4759 |
| 25° | 4779 | 4707 | 4736 |
| 30° | 4743 | 4671 | 4710 |
| 35° | 4716 | 4633 | 4722 |
| 40° | 4683 | 4605 | 4788 |
| 45° | 4639 | 4613 | 4933 |
| 50° | 4581 | 4674 | 5176 |
| 55° | 4522 | 4807 | 5383 |
| 60° | 4443 | 5026 | 5551 |
| 65° | 4333 | 5195 | 5595 |
| 70° | 4168 | 5308 | 5377 |
| 75° | 3840 | 5136 | 4805 |
| 80° | 3400 | 4420 | 3685 |
| 85° | 2448 | 2238 | 1463 |



TEST NUMBER: P#

CATALOG NUMBER: 4RSRK-TS-150-HE-L830

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 169.7 | 3.1 |
| 10°-20° | 485.7 | 8.8 |
| 20°-30° | 735.4 | 13.3 |
| 30°-40° | 892.0 | 16.2 |
| 40°-50° | 954.2 | 17.3 |
| 50°-60° | 924.9 | 16.8 |
| 60°-70° | 774.6 | 14.0 |
| 70°-80° | 476.0 | 8.6 |
| 80°-90° | 105.1 | 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° | 1390.8 | 25.2 |
| 0°-40° | 2282.8 | 41.4 |
| 0°-60° | 4162.0 | 75.4 |
| 0°-90° | 5517.7 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 5517.7 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|------|-------|------|-------|------|------|
| 0° | 1792 | 1792 | 1792 | 1792 | 1792 | |
| 5° | 1793 | 1789 | 1776 | 1787 | 1786 | 170 |
| 15° | 1730 | 1726 | 1713 | 1721 | 1716 | 488 |
| 25° | 1610 | 1600 | 1585 | 1596 | 1595 | 741 |
| 35° | 1436 | 1417 | 1410 | 1434 | 1437 | 898 |
| 45° | 1219 | 1193 | 1212 | 1274 | 1296 | 940 |
| 55° | 964 | 938 | 1025 | 1126 | 1147 | 860 |
| 65° | 680 | 677 | 816 | 871 | 879 | 673 |
| 75° | 369 | 431 | 494 | 473 | 462 | 393 |
| 85° | 79 | 106 | 72 | 50 | 47 | 100 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P#

CATALOG NUMBER: 4RSRK-TS-150-HE-L830

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|--------|--------|--------|--------|--------|
| 0° | 1792.2 | 1792.2 | 1792.2 | 1792.2 | 1792.2 |
| 2.5° | 1798.9 | 1794.1 | 1780.6 | 1792.2 | 1791.2 |
| 5° | 1793.1 | 1789.3 | 1775.7 | 1787.3 | 1786.4 |
| 7.5° | 1784.4 | 1780.6 | 1767.0 | 1778.6 | 1775.7 |
| 10° | 1769.9 | 1767.0 | 1754.5 | 1763.2 | 1759.3 |
| 12.5° | 1752.5 | 1749.6 | 1735.1 | 1744.8 | 1740.0 |
| 15° | 1730.3 | 1726.4 | 1712.9 | 1720.6 | 1715.8 |
| 17.5° | 1705.2 | 1700.3 | 1686.8 | 1694.5 | 1689.7 |
| 20° | 1677.1 | 1670.4 | 1655.9 | 1666.5 | 1661.7 |
| 22.5° | 1643.3 | 1638.5 | 1621.1 | 1632.7 | 1627.8 |
| 25° | 1609.5 | 1599.8 | 1585.3 | 1595.9 | 1595.0 |
| 27.5° | 1568.9 | 1559.2 | 1544.7 | 1557.3 | 1555.4 |
| 30° | 1526.4 | 1515.7 | 1503.2 | 1515.7 | 1515.7 |
| 32.5° | 1481.9 | 1468.4 | 1458.7 | 1473.2 | 1478.0 |
| 35° | 1435.5 | 1417.1 | 1410.4 | 1434.5 | 1437.4 |
| 37.5° | 1384.3 | 1365.9 | 1360.1 | 1392.0 | 1399.7 |
| 40° | 1333.0 | 1309.8 | 1310.8 | 1351.4 | 1363.0 |
| 42.5° | 1276.0 | 1252.8 | 1263.4 | 1310.8 | 1332.1 |
| 45° | 1219.0 | 1192.9 | 1212.2 | 1274.1 | 1296.3 |
| 47.5° | 1159.0 | 1133.9 | 1165.8 | 1238.3 | 1266.3 |
| 50° | 1094.3 | 1069.1 | 1116.5 | 1204.5 | 1236.4 |
| 52.5° | 1028.5 | 1002.4 | 1069.1 | 1169.7 | 1198.7 |
| 55° | 963.8 | 937.7 | 1024.7 | 1126.2 | 1147.4 |
| 57.5° | 894.2 | 871.9 | 978.3 | 1069.1 | 1090.4 |
| 60° | 825.5 | 806.2 | 933.8 | 1011.1 | 1031.4 |
| 62.5° | 755.0 | 740.5 | 879.7 | 944.4 | 956.0 |
| 65° | 680.5 | 676.7 | 815.9 | 871.0 | 878.7 |
| 67.5° | 606.1 | 615.8 | 750.1 | 785.9 | 786.9 |
| 70° | 529.7 | 555.8 | 674.7 | 690.2 | 683.4 |
| 72.5° | 452.4 | 497.8 | 591.6 | 583.9 | 578.1 |
| 75° | 369.3 | 431.1 | 494.0 | 472.7 | 462.1 |
| 77.5° | 293.9 | 363.5 | 389.6 | 359.6 | 343.2 |
| 80° | 219.4 | 287.1 | 285.2 | 246.5 | 237.8 |
| 82.5° | 147.9 | 200.1 | 171.1 | 139.2 | 121.8 |
| 85° | 79.3 | 106.3 | 72.5 | 50.3 | 47.4 |
| 87.5° | 30.0 | 25.1 | 19.3 | 17.4 | 17.4 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)