

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-65-HE-L840**

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-65-HE-L840
Description: 4ft RSRK, 650 LUMEN PER FOOT 80CRI 4000K CCT WITH TRILOBE SMOOTH LENS
Light Source: -
Ballast/Driver: -

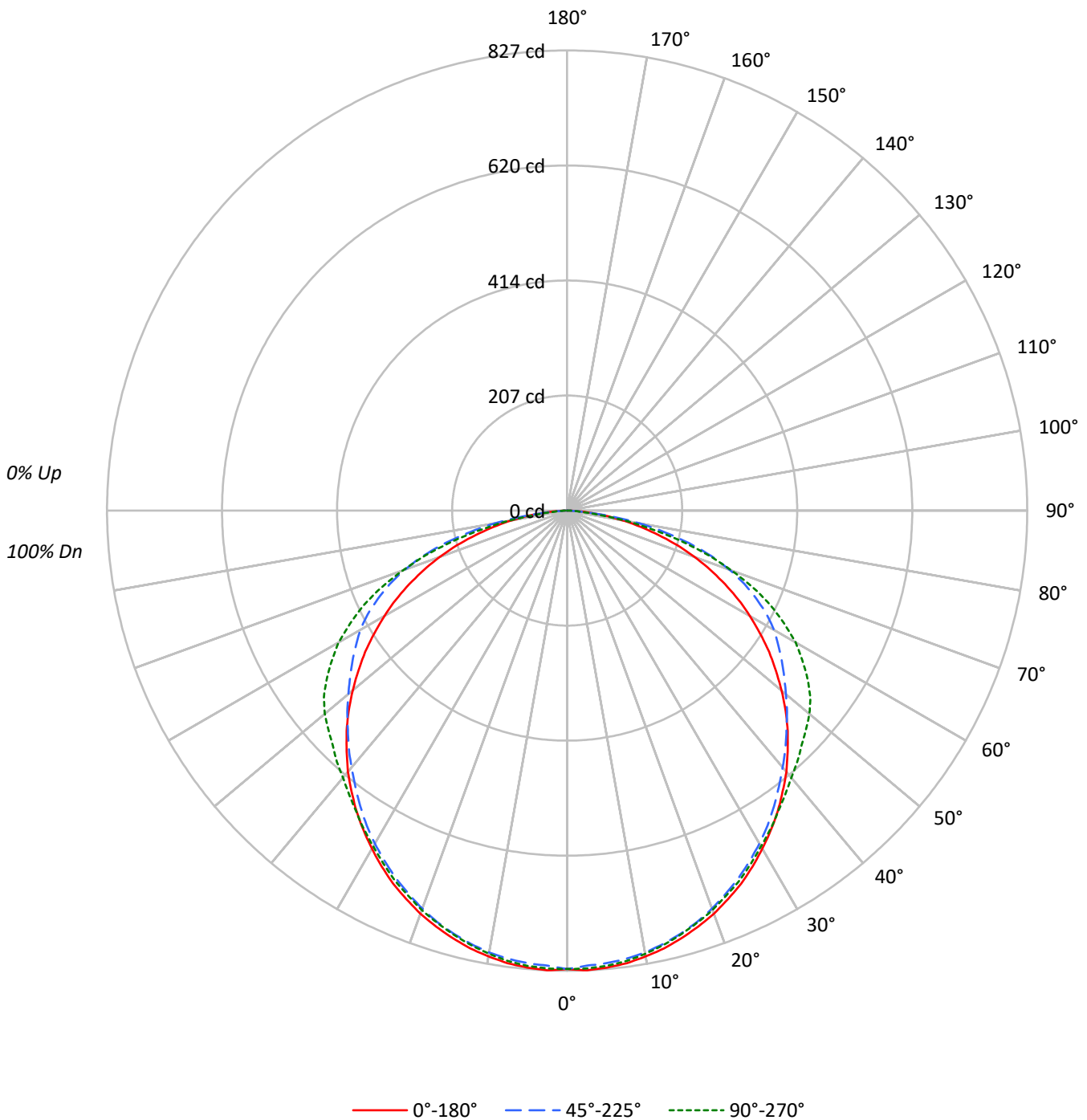
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2536.7 lumens
Efficiency: N/A
Efficacy: 134.2 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): 18.9
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-65-HE-L840

Luminous Intensity Polar Plot





TEST NUMBER: P#

CATALOG NUMBER: 4RSRK-TS-65-HE-L840

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° | 2217 | 2217 | 2217 |
| 5° | 2227 | 2205 | 2219 |
| 10° | 2223 | 2204 | 2210 |
| 15° | 2216 | 2194 | 2198 |
| 20° | 2208 | 2180 | 2188 |
| 25° | 2197 | 2164 | 2177 |
| 30° | 2180 | 2147 | 2165 |
| 35° | 2168 | 2130 | 2171 |
| 40° | 2153 | 2117 | 2201 |
| 45° | 2133 | 2121 | 2268 |
| 50° | 2106 | 2149 | 2380 |
| 55° | 2079 | 2210 | 2475 |
| 60° | 2042 | 2310 | 2552 |
| 65° | 1992 | 2388 | 2572 |
| 70° | 1916 | 2441 | 2472 |
| 75° | 1765 | 2361 | 2208 |
| 80° | 1564 | 2032 | 1694 |
| 85° | 1124 | 1028 | 673 |



TEST NUMBER: P#

CATALOG NUMBER: 4RSRK-TS-65-HE-L840

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 78.0 | 3.1 |
| 10°-20° | 223.3 | 8.8 |
| 20°-30° | 338.1 | 13.3 |
| 30°-40° | 410.1 | 16.2 |
| 40°-50° | 438.7 | 17.3 |
| 50°-60° | 425.2 | 16.8 |
| 60°-70° | 356.1 | 14.0 |
| 70°-80° | 218.8 | 8.6 |
| 80°-90° | 48.3 | 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° | 639.4 | 25.2 |
| 0°-40° | 1049.5 | 41.4 |
| 0°-60° | 1913.4 | 75.4 |
| 0°-90° | 2536.7 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 2536.7 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|-----|-------|-----|-------|-----|------|
| 0° | 824 | 824 | 824 | 824 | 824 | |
| 5° | 824 | 823 | 816 | 822 | 821 | 78 |
| 15° | 796 | 794 | 788 | 791 | 789 | 225 |
| 25° | 740 | 736 | 729 | 734 | 733 | 341 |
| 35° | 660 | 652 | 648 | 660 | 661 | 413 |
| 45° | 560 | 548 | 557 | 586 | 596 | 432 |
| 55° | 443 | 431 | 471 | 518 | 528 | 396 |
| 65° | 313 | 311 | 375 | 400 | 404 | 309 |
| 75° | 170 | 198 | 227 | 217 | 212 | 181 |
| 85° | 36 | 49 | 33 | 23 | 22 | 46 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P#

CATALOG NUMBER: 4RSRK-TS-65-HE-L840

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|-------|-------|-------|-------|-------|
| 0° | 823.9 | 823.9 | 823.9 | 823.9 | 823.9 |
| 2.5° | 827.0 | 824.8 | 818.6 | 823.9 | 823.5 |
| 5° | 824.4 | 822.6 | 816.4 | 821.7 | 821.3 |
| 7.5° | 820.4 | 818.6 | 812.4 | 817.7 | 816.4 |
| 10° | 813.7 | 812.4 | 806.6 | 810.6 | 808.8 |
| 12.5° | 805.7 | 804.4 | 797.7 | 802.2 | 799.9 |
| 15° | 795.5 | 793.7 | 787.5 | 791.1 | 788.8 |
| 17.5° | 783.9 | 781.7 | 775.5 | 779.1 | 776.8 |
| 20° | 771.1 | 767.9 | 761.3 | 766.2 | 763.9 |
| 22.5° | 755.5 | 753.3 | 745.3 | 750.6 | 748.4 |
| 25° | 739.9 | 735.5 | 728.8 | 733.7 | 733.3 |
| 27.5° | 721.3 | 716.8 | 710.2 | 715.9 | 715.1 |
| 30° | 701.7 | 696.8 | 691.1 | 696.8 | 696.8 |
| 32.5° | 681.3 | 675.1 | 670.6 | 677.3 | 679.5 |
| 35° | 659.9 | 651.5 | 648.4 | 659.5 | 660.8 |
| 37.5° | 636.4 | 628.0 | 625.3 | 640.0 | 643.5 |
| 40° | 612.8 | 602.2 | 602.6 | 621.3 | 626.6 |
| 42.5° | 586.6 | 576.0 | 580.8 | 602.6 | 612.4 |
| 45° | 560.4 | 548.4 | 557.3 | 585.7 | 596.0 |
| 47.5° | 532.8 | 521.3 | 536.0 | 569.3 | 582.2 |
| 50° | 503.1 | 491.5 | 513.3 | 553.7 | 568.4 |
| 52.5° | 472.9 | 460.9 | 491.5 | 537.7 | 551.1 |
| 55° | 443.1 | 431.1 | 471.1 | 517.7 | 527.5 |
| 57.5° | 411.1 | 400.9 | 449.7 | 491.5 | 501.3 |
| 60° | 379.5 | 370.6 | 429.3 | 464.9 | 474.2 |
| 62.5° | 347.1 | 340.4 | 404.4 | 434.2 | 439.5 |
| 65° | 312.9 | 311.1 | 375.1 | 400.4 | 404.0 |
| 67.5° | 278.6 | 283.1 | 344.9 | 361.3 | 361.8 |
| 70° | 243.5 | 255.5 | 310.2 | 317.3 | 314.2 |
| 72.5° | 208.0 | 228.9 | 272.0 | 268.4 | 265.8 |
| 75° | 169.8 | 198.2 | 227.1 | 217.3 | 212.4 |
| 77.5° | 135.1 | 167.1 | 179.1 | 165.3 | 157.8 |
| 80° | 100.9 | 132.0 | 131.1 | 113.3 | 109.3 |
| 82.5° | 68.0 | 92.0 | 78.7 | 64.0 | 56.0 |
| 85° | 36.4 | 48.9 | 33.3 | 23.1 | 21.8 |
| 87.5° | 13.8 | 11.6 | 8.9 | 8.0 | 8.0 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)