

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: NEO-RAY

Report Number: P334427

Luminaire Tested: **S125RDP-S850D930-4F0-1E-UDD-F**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P334427
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-27)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S125RDP-S850D930-4F0-1E-UDD-F
Description: DEFINE 5 REGRESSED DIRECT LED LUMINAIRE, FLUSH SATIN WHITE DIFFUSER
PENDANT/SURFACE/WALL MOUNT, 850 LUMENS PER FOOT
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2550.4 lumens
Efficiency: N/A
Efficacy: 97.0 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.11 / 1.25
Luminous Opening: Rectangular (W 0.42' x L: 4' x H: 0')
CIE Type: Direct

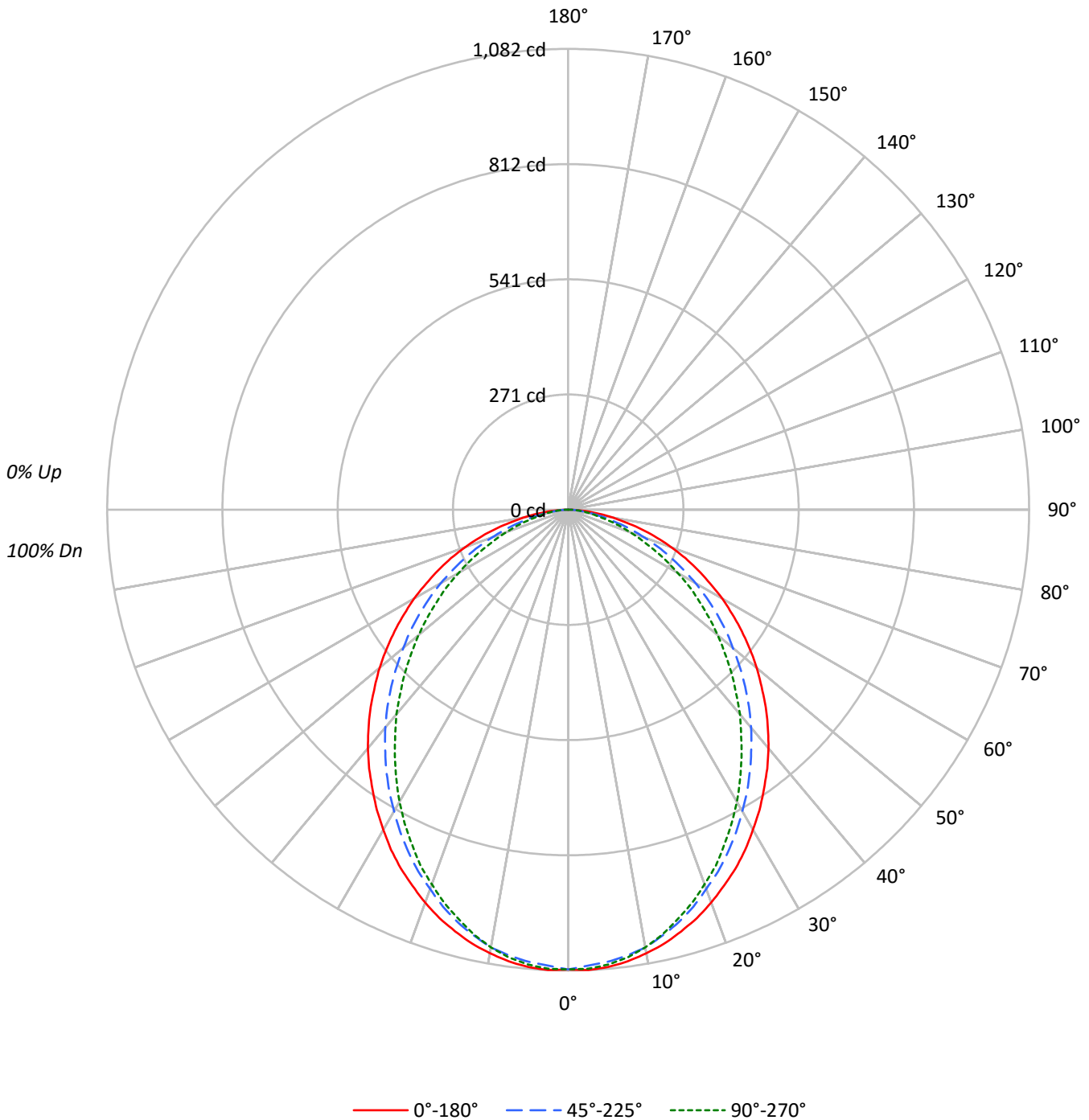
Input Watts (W): 26.3
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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 | 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 | 109 | 105 | 101 | 97 | 107 | 103 | 99 | 96 | 99 | 96 | 93 | 95 | 92 | 90 | 91 | 89 | 87 | 85 | | | | | 85 | | | |
| 2 | 100 | 92 | 86 | 80 | 98 | 90 | 84 | 79 | 87 | 82 | 78 | 84 | 79 | 76 | 81 | 77 | 74 | 72 | | | | | 72 | | | |
| 3 | 92 | 82 | 74 | 68 | 89 | 80 | 73 | 67 | 77 | 71 | 66 | 74 | 69 | 65 | 72 | 67 | 64 | 61 | | | | | 61 | | | |
| 4 | 84 | 73 | 64 | 58 | 82 | 71 | 64 | 57 | 69 | 62 | 57 | 67 | 61 | 56 | 64 | 59 | 55 | 53 | | | | | 53 | | | |
| 5 | 78 | 65 | 57 | 50 | 76 | 64 | 56 | 50 | 62 | 55 | 49 | 60 | 54 | 49 | 58 | 53 | 48 | 46 | | | | | 46 | | | |
| 6 | 72 | 59 | 50 | 44 | 70 | 58 | 50 | 44 | 56 | 49 | 44 | 55 | 48 | 43 | 53 | 47 | 43 | 41 | | | | | 41 | | | |
| 7 | 67 | 54 | 45 | 39 | 65 | 53 | 45 | 39 | 51 | 44 | 39 | 50 | 43 | 39 | 49 | 43 | 38 | 36 | | | | | 36 | | | |
| 8 | 62 | 49 | 41 | 35 | 61 | 48 | 41 | 35 | 47 | 40 | 35 | 46 | 39 | 35 | 45 | 39 | 34 | 33 | | | | | 33 | | | |
| 9 | 58 | 45 | 37 | 32 | 57 | 45 | 37 | 32 | 44 | 37 | 32 | 42 | 36 | 31 | 41 | 36 | 31 | 29 | | | | | 29 | | | |
| 10 | 55 | 42 | 34 | 29 | 54 | 41 | 34 | 29 | 40 | 34 | 29 | 39 | 33 | 29 | 39 | 33 | 29 | 27 | | | | | 27 | | | |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|------|------|------|
| 0° | 6972 | 6972 | 6972 |
| 5° | 6987 | 6908 | 6950 |
| 10° | 6934 | 6844 | 6844 |
| 15° | 6852 | 6705 | 6651 |
| 20° | 6746 | 6511 | 6433 |
| 25° | 6623 | 6321 | 6182 |
| 30° | 6469 | 6098 | 5904 |
| 35° | 6312 | 5869 | 5592 |
| 40° | 6165 | 5629 | 5286 |
| 45° | 5987 | 5361 | 4952 |
| 50° | 5807 | 5071 | 4604 |
| 55° | 5599 | 4792 | 4233 |
| 60° | 5391 | 4455 | 3834 |
| 65° | 5145 | 4062 | 3376 |
| 70° | 4864 | 3571 | 2910 |
| 75° | 4477 | 3012 | 2420 |
| 80° | 3942 | 2365 | 2031 |
| 85° | 3320 | 1934 | 1815 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 101.6 | 4.0 |
| 10°-20° | 283.9 | 11.1 |
| 20°-30° | 411.7 | 16.1 |
| 30°-40° | 469.0 | 18.4 |
| 40°-50° | 457.2 | 17.9 |
| 50°-60° | 384.7 | 15.1 |
| 60°-70° | 269.6 | 10.6 |
| 70°-80° | 138.2 | 5.4 |
| 80°-90° | 34.5 | 1.4 |
| 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° | 797.2 | 31.3 |
| 0°-40° | 1266.2 | 49.6 |
| 0°-60° | 2108.1 | 82.7 |
| 0°-90° | 2550.4 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 2550.4 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|------|-------|------|-------|------|------|
| 0° | 1080 | 1080 | 1080 | 1080 | 1080 | |
| 5° | 1078 | 1075 | 1066 | 1074 | 1072 | 102 |
| 15° | 1025 | 1020 | 1003 | 1002 | 995 | 289 |
| 25° | 929 | 917 | 887 | 876 | 868 | 428 |
| 35° | 801 | 781 | 744 | 721 | 709 | 501 |
| 45° | 656 | 632 | 587 | 554 | 542 | 506 |
| 55° | 497 | 471 | 426 | 389 | 376 | 445 |
| 65° | 337 | 309 | 266 | 233 | 221 | 333 |
| 75° | 179 | 155 | 121 | 103 | 97 | 190 |
| 85° | 45 | 30 | 26 | 25 | 24 | 52 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



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CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|--------|--------|--------|--------|--------|
| 0° | 1079.5 | 1079.5 | 1079.5 | 1079.5 | 1079.5 |
| 2.5° | 1081.9 | 1079.5 | 1071.3 | 1079.5 | 1078.6 |
| 5° | 1077.8 | 1074.6 | 1065.6 | 1073.7 | 1072.1 |
| 7.5° | 1069.7 | 1066.4 | 1055.8 | 1062.3 | 1060.7 |
| 10° | 1057.4 | 1055.0 | 1043.6 | 1046.0 | 1043.6 |
| 12.5° | 1043.6 | 1040.3 | 1024.0 | 1025.6 | 1021.6 |
| 15° | 1024.8 | 1019.9 | 1002.8 | 1002.0 | 994.7 |
| 17.5° | 1005.3 | 997.9 | 977.5 | 973.5 | 967.8 |
| 20° | 981.6 | 973.5 | 947.4 | 943.3 | 936.0 |
| 22.5° | 955.5 | 947.4 | 919.7 | 910.7 | 905.0 |
| 25° | 929.4 | 917.2 | 887.0 | 876.4 | 867.5 |
| 27.5° | 900.1 | 885.4 | 853.6 | 839.8 | 830.8 |
| 30° | 867.5 | 852.0 | 817.7 | 799.0 | 791.7 |
| 32.5° | 835.7 | 816.9 | 781.9 | 760.7 | 750.9 |
| 35° | 800.6 | 781.1 | 744.4 | 720.7 | 709.3 |
| 37.5° | 767.2 | 743.6 | 706.0 | 678.3 | 666.9 |
| 40° | 731.3 | 706.9 | 667.7 | 636.7 | 627.0 |
| 42.5° | 693.8 | 668.5 | 627.8 | 598.4 | 582.9 |
| 45° | 655.5 | 631.9 | 587.0 | 554.4 | 542.2 |
| 47.5° | 615.6 | 591.1 | 546.3 | 512.8 | 499.0 |
| 50° | 578.0 | 551.1 | 504.7 | 470.4 | 458.2 |
| 52.5° | 537.3 | 509.6 | 466.4 | 428.8 | 416.6 |
| 55° | 497.3 | 471.2 | 425.6 | 388.9 | 375.9 |
| 57.5° | 456.6 | 428.8 | 384.8 | 348.9 | 337.5 |
| 60° | 417.4 | 388.9 | 344.9 | 309.0 | 296.8 |
| 62.5° | 375.9 | 348.9 | 304.1 | 271.5 | 259.3 |
| 65° | 336.7 | 309.0 | 265.8 | 233.2 | 220.9 |
| 67.5° | 297.6 | 269.9 | 228.3 | 197.3 | 187.5 |
| 70° | 257.6 | 229.9 | 189.1 | 163.9 | 154.1 |
| 72.5° | 218.5 | 191.6 | 154.1 | 131.3 | 125.6 |
| 75° | 179.4 | 154.9 | 120.7 | 102.7 | 97.0 |
| 77.5° | 139.4 | 119.8 | 91.3 | 77.5 | 72.6 |
| 80° | 106.0 | 86.4 | 63.6 | 56.3 | 54.6 |
| 82.5° | 73.4 | 56.3 | 42.4 | 39.9 | 39.1 |
| 85° | 44.8 | 30.2 | 26.1 | 25.3 | 24.5 |
| 87.5° | 18.8 | 13.0 | 12.2 | 12.2 | 11.4 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)