

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: P334322

Luminaire Tested: **S125DW-S850D930-4F0-1E-UDD-D**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P334322
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-17)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S125DW-S850D930-4F0-1E-UDD-D
Description: DEFINE 5 DIRECT LED LUMINAIRE, DROP 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: 2576.1 lumens
Efficiency: N/A
Efficacy: 98.0 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.21 / 1.34
Luminous Opening: Rectangular (W 0.42' x L: 4' x H: 0')
CIE Type: Direct

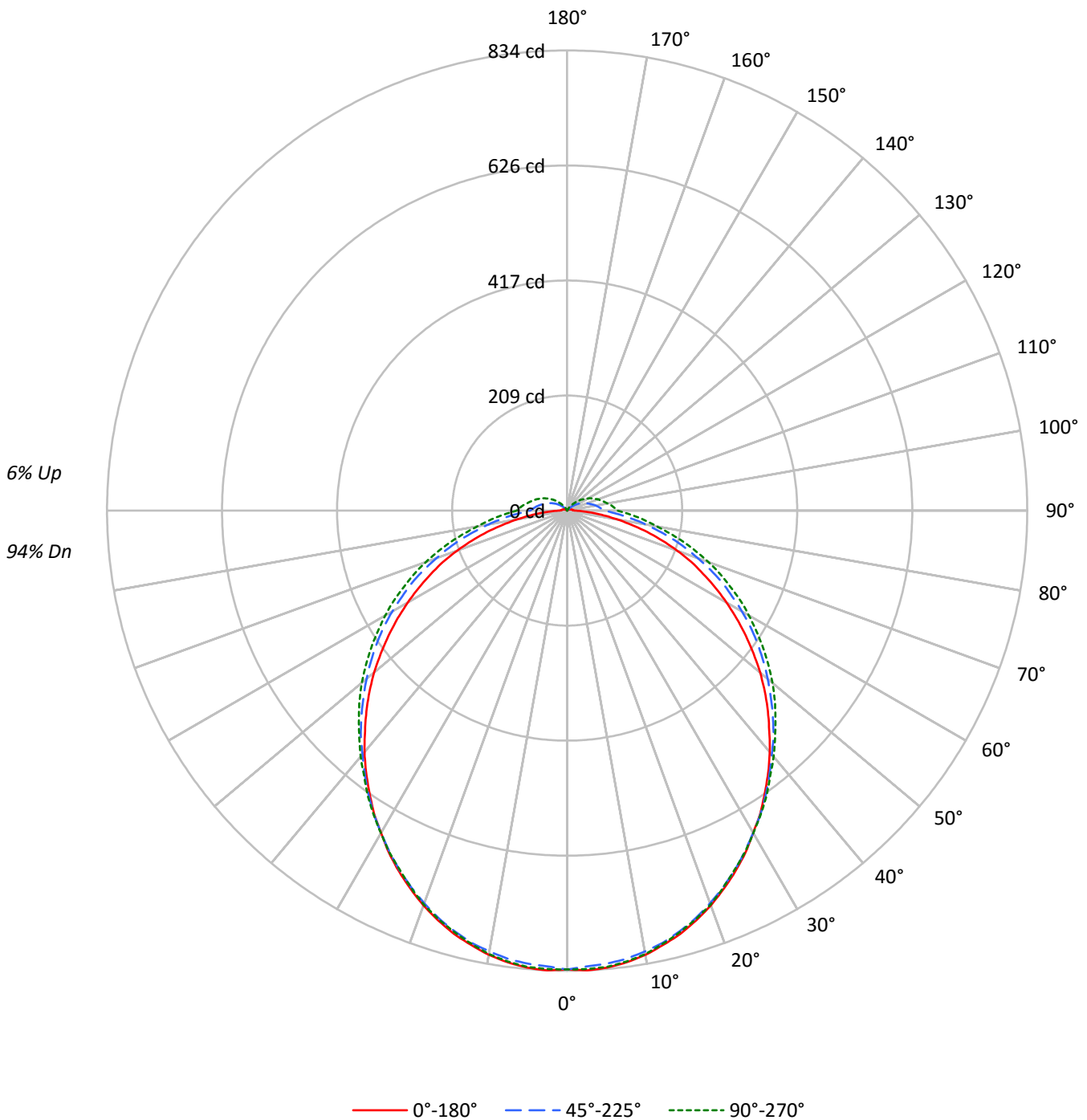
Input Watts (W): 26.3
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





TEST NUMBER: P334322

CATALOG NUMBER: S125DW-S850D930-4F0-1E-UDD-D

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 | 118 | 118 | 118 | 118 | 114 | 114 | 114 | 114 | 108 | 108 | 108 | 102 | 102 | 102 | 96 | 96 | 96 | 94 |
| 1 | 106 | 101 | 96 | 92 | 103 | 98 | 94 | 90 | 93 | 89 | 86 | 88 | 85 | 82 | 83 | 81 | 79 | 76 |
| 2 | 96 | 88 | 80 | 74 | 93 | 85 | 78 | 73 | 81 | 75 | 70 | 76 | 72 | 68 | 72 | 69 | 65 | 63 |
| 3 | 88 | 77 | 68 | 61 | 84 | 75 | 67 | 60 | 71 | 64 | 59 | 67 | 61 | 57 | 64 | 59 | 55 | 53 |
| 4 | 80 | 68 | 59 | 52 | 77 | 66 | 58 | 51 | 63 | 55 | 50 | 60 | 53 | 48 | 57 | 51 | 47 | 45 |
| 5 | 74 | 60 | 51 | 44 | 71 | 59 | 50 | 44 | 56 | 49 | 43 | 53 | 47 | 42 | 51 | 45 | 41 | 39 |
| 6 | 68 | 54 | 45 | 39 | 66 | 53 | 45 | 38 | 51 | 43 | 38 | 48 | 42 | 37 | 46 | 40 | 36 | 34 |
| 7 | 63 | 49 | 40 | 34 | 61 | 48 | 40 | 34 | 46 | 39 | 33 | 44 | 37 | 33 | 42 | 36 | 32 | 30 |
| 8 | 59 | 45 | 36 | 30 | 57 | 44 | 36 | 30 | 42 | 35 | 30 | 40 | 34 | 29 | 39 | 33 | 29 | 27 |
| 9 | 55 | 41 | 33 | 27 | 53 | 40 | 33 | 27 | 39 | 32 | 27 | 37 | 31 | 26 | 36 | 30 | 26 | 24 |
| 10 | 51 | 38 | 30 | 25 | 50 | 37 | 30 | 25 | 36 | 29 | 24 | 35 | 28 | 24 | 33 | 28 | 23 | 22 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|------|------|------|
| 0° | 5371 | 5371 | 5371 |
| 5° | 5391 | 5344 | 5381 |
| 10° | 5362 | 5320 | 5352 |
| 15° | 5309 | 5277 | 5287 |
| 20° | 5234 | 5205 | 5223 |
| 25° | 5141 | 5124 | 5119 |
| 30° | 5029 | 5029 | 5035 |
| 35° | 4924 | 4950 | 4969 |
| 40° | 4818 | 4866 | 4908 |
| 45° | 4699 | 4818 | 4877 |
| 50° | 4588 | 4767 | 4882 |
| 55° | 4452 | 4746 | 4883 |
| 60° | 4308 | 4729 | 4917 |
| 65° | 4161 | 4747 | 4983 |
| 70° | 4003 | 4757 | 5142 |
| 75° | 3743 | 4923 | 5432 |
| 80° | 3425 | 5367 | 6155 |
| 85° | 3320 | 7432 | 9240 |



TEST NUMBER: P334322

CATALOG NUMBER: S125DW-S850D930-4F0-1E-UDD-D

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 78.7 | 3.1 |
| 10°-20° | 223.4 | 8.7 |
| 20°-30° | 332.2 | 12.9 |
| 30°-40° | 393.4 | 15.3 |
| 40°-50° | 406.7 | 15.8 |
| 50°-60° | 374.7 | 14.5 |
| 60°-70° | 302.9 | 11.8 |
| 70°-80° | 202.7 | 7.9 |
| 80°-90° | 104.7 | 4.1 |
| 90°-100° | 59.0 | 2.3 |
| 100°-110° | 43.5 | 1.7 |
| 110°-120° | 29.1 | 1.1 |
| 120°-130° | 16.5 | 0.6 |
| 130°-140° | 7.2 | 0.3 |
| 140°-150° | 1.4 | 0.1 |
| 150°-160° | 0.0 | 0.0 |
| 160°-170° | 0.0 | 0.0 |
| 170°-180° | 0.0 | 0.0 |
| 0°-30° | 634.3 | 24.6 |
| 0°-40° | 1027.7 | 39.9 |
| 0°-60° | 1809.1 | 70.2 |
| 0°-90° | 2419.4 | 93.9 |
| 90°-120° | 131.6 | 5.1 |
| 90°-150° | 156.7 | 6.1 |
| 90°-180° | 157.0 | 6.1 |
| 0°-180° | 2576.1 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|-----|-------|-----|-------|-----|------|
| 0° | 832 | 832 | 832 | 832 | 832 | |
| 5° | 832 | 830 | 824 | 831 | 830 | 79 |
| 15° | 794 | 795 | 789 | 794 | 791 | 224 |
| 25° | 722 | 724 | 719 | 722 | 718 | 332 |
| 35° | 624 | 630 | 628 | 630 | 630 | 391 |
| 45° | 514 | 523 | 528 | 533 | 534 | 397 |
| 55° | 395 | 408 | 422 | 430 | 434 | 353 |
| 65° | 272 | 291 | 311 | 323 | 326 | 270 |
| 75° | 150 | 171 | 197 | 214 | 218 | 159 |
| 85° | 45 | 72 | 100 | 118 | 125 | 47 |
| 90° | 13 | 39 | 67 | 86 | 91 | 9 |
| 95° | 11 | 32 | 60 | 78 | 83 | 8 |
| 105° | 7 | 20 | 45 | 61 | 67 | 8 |
| 115° | 5 | 11 | 32 | 46 | 51 | 5 |
| 125° | 3 | 2 | 19 | 32 | 36 | 3 |
| 135° | 2 | 1 | 6 | 17 | 21 | 1 |
| 145° | 1 | 0 | 0 | 4 | 7 | 0 |
| 155° | 0 | 0 | 0 | 0 | 0 | 0 |
| 165° | 0 | 0 | 0 | 0 | 0 | 0 |
| 175° | 0 | 0 | 0 | 0 | 0 | 0 |
| 180° | 0 | 0 | 0 | 0 | 0 | 0 |



TEST NUMBER: P334322

CATALOG NUMBER: S125DW-S850D930-4F0-1E-UDD-D

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|-------|-------|-------|-------|-------|
| 0° | 831.6 | 831.6 | 831.6 | 831.6 | 831.6 |
| 2.5° | 834.1 | 832.4 | 826.7 | 832.4 | 831.6 |
| 5° | 831.6 | 830.0 | 824.3 | 830.8 | 830.0 |
| 7.5° | 825.9 | 825.1 | 819.4 | 825.1 | 824.3 |
| 10° | 817.7 | 817.7 | 811.2 | 816.9 | 816.1 |
| 12.5° | 806.3 | 807.1 | 802.3 | 806.3 | 803.9 |
| 15° | 794.1 | 794.9 | 789.2 | 794.1 | 790.8 |
| 17.5° | 778.6 | 780.2 | 774.5 | 778.6 | 776.2 |
| 20° | 761.5 | 763.1 | 757.4 | 759.9 | 759.9 |
| 22.5° | 741.9 | 745.2 | 738.7 | 741.9 | 739.5 |
| 25° | 721.5 | 724.0 | 719.1 | 722.4 | 718.3 |
| 27.5° | 699.5 | 702.8 | 697.1 | 699.5 | 697.9 |
| 30° | 674.3 | 679.1 | 674.3 | 675.9 | 675.1 |
| 32.5° | 651.4 | 655.5 | 652.2 | 653.9 | 653.1 |
| 35° | 624.5 | 630.2 | 627.8 | 630.2 | 630.2 |
| 37.5° | 598.4 | 603.3 | 602.5 | 605.8 | 605.0 |
| 40° | 571.5 | 578.0 | 577.2 | 580.5 | 582.1 |
| 42.5° | 542.2 | 551.1 | 553.6 | 557.7 | 557.7 |
| 45° | 514.5 | 523.4 | 527.5 | 533.2 | 534.0 |
| 47.5° | 485.9 | 494.1 | 500.6 | 508.7 | 510.4 |
| 50° | 456.6 | 465.5 | 474.5 | 483.5 | 485.9 |
| 52.5° | 425.6 | 437.0 | 448.4 | 458.2 | 459.8 |
| 55° | 395.4 | 408.5 | 421.5 | 430.5 | 433.7 |
| 57.5° | 364.4 | 379.9 | 394.6 | 404.4 | 406.8 |
| 60° | 333.5 | 349.8 | 366.1 | 378.3 | 380.7 |
| 62.5° | 303.3 | 319.6 | 337.5 | 351.4 | 354.7 |
| 65° | 272.3 | 291.1 | 310.6 | 322.9 | 326.1 |
| 67.5° | 243.8 | 261.7 | 281.3 | 296.0 | 300.0 |
| 70° | 212.0 | 230.7 | 251.9 | 267.4 | 272.3 |
| 72.5° | 181.0 | 200.6 | 224.2 | 241.3 | 244.6 |
| 75° | 150.0 | 171.2 | 197.3 | 213.6 | 217.7 |
| 77.5° | 119.8 | 144.3 | 168.8 | 186.7 | 190.0 |
| 80° | 92.1 | 116.6 | 144.3 | 162.2 | 165.5 |
| 82.5° | 66.9 | 92.9 | 121.5 | 138.6 | 145.1 |
| 85° | 44.8 | 71.7 | 100.3 | 118.2 | 124.7 |
| 87.5° | 28.5 | 54.6 | 82.3 | 101.1 | 106.8 |
| 90° | 13.0 | 39.1 | 66.9 | 85.6 | 91.3 |
| 92.5° | 11.4 | 35.1 | 63.6 | 81.5 | 87.2 |
| 95° | 10.6 | 31.8 | 59.5 | 77.5 | 83.2 |
| 97.5° | 9.8 | 29.4 | 56.3 | 73.4 | 79.1 |
| 100° | 9.0 | 26.1 | 52.2 | 69.3 | 74.2 |
| 102.5° | 8.2 | 23.6 | 48.9 | 65.2 | 70.1 |
| 105° | 7.3 | 20.4 | 44.8 | 61.1 | 66.9 |
| 107.5° | 6.5 | 17.9 | 41.6 | 57.9 | 62.8 |
| 110° | 5.7 | 15.5 | 38.3 | 53.8 | 59.5 |



TEST NUMBER: P334322

CATALOG NUMBER: S125DW-S850D930-4F0-1E-UDD-D

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|-----|-------|------|-------|------|
| 112.5° | 5.7 | 13.0 | 35.1 | 49.7 | 55.4 |
| 115° | 4.9 | 10.6 | 31.8 | 46.5 | 51.4 |
| 117.5° | 4.1 | 8.2 | 28.5 | 42.4 | 48.1 |
| 120° | 4.1 | 6.5 | 25.3 | 39.1 | 44.0 |
| 122.5° | 3.3 | 4.1 | 22.0 | 35.1 | 39.9 |
| 125° | 3.3 | 2.4 | 18.8 | 31.8 | 35.9 |
| 127.5° | 2.4 | 1.6 | 15.5 | 27.7 | 32.6 |
| 130° | 2.4 | 1.6 | 13.0 | 24.5 | 28.5 |
| 132.5° | 1.6 | 1.6 | 9.8 | 21.2 | 24.5 |
| 135° | 1.6 | 0.8 | 6.5 | 17.1 | 21.2 |
| 137.5° | 1.6 | 0.8 | 4.1 | 13.9 | 17.1 |
| 140° | 0.8 | 0.8 | 1.6 | 10.6 | 13.9 |
| 142.5° | 0.8 | 0.0 | 0.0 | 7.3 | 10.6 |
| 145° | 0.8 | 0.0 | 0.0 | 4.1 | 7.3 |
| 147.5° | 0.0 | 0.0 | 0.0 | 1.6 | 3.3 |
| 150° | 0.0 | 0.0 | 0.0 | 0.0 | 0.8 |
| 152.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 155° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 157.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 160° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 162.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 165° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 167.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 170° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 172.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 175° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 177.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 180° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)