

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: P334256

Luminaire Tested: **S124RDW-S575D935-4F0-1E-UDD-F**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P334256
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-26)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S124RDW-S575D935-4F0-1E-UDD-F
Description: DEFINE 4 REGRESSED DIRECT LED LUMINAIRE, FLUSH SATIN WHITE DIFFUSER
PENDANT/SURFACE/WALL MOUNT, 575 LUMENS PER FOOT
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1865.6 lumens
Efficiency: N/A
Efficacy: 99.2 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.09 / 1.24
Luminous Opening: Rectangular (W 0.33' x L: 4' x H: 0')
CIE Type: Direct

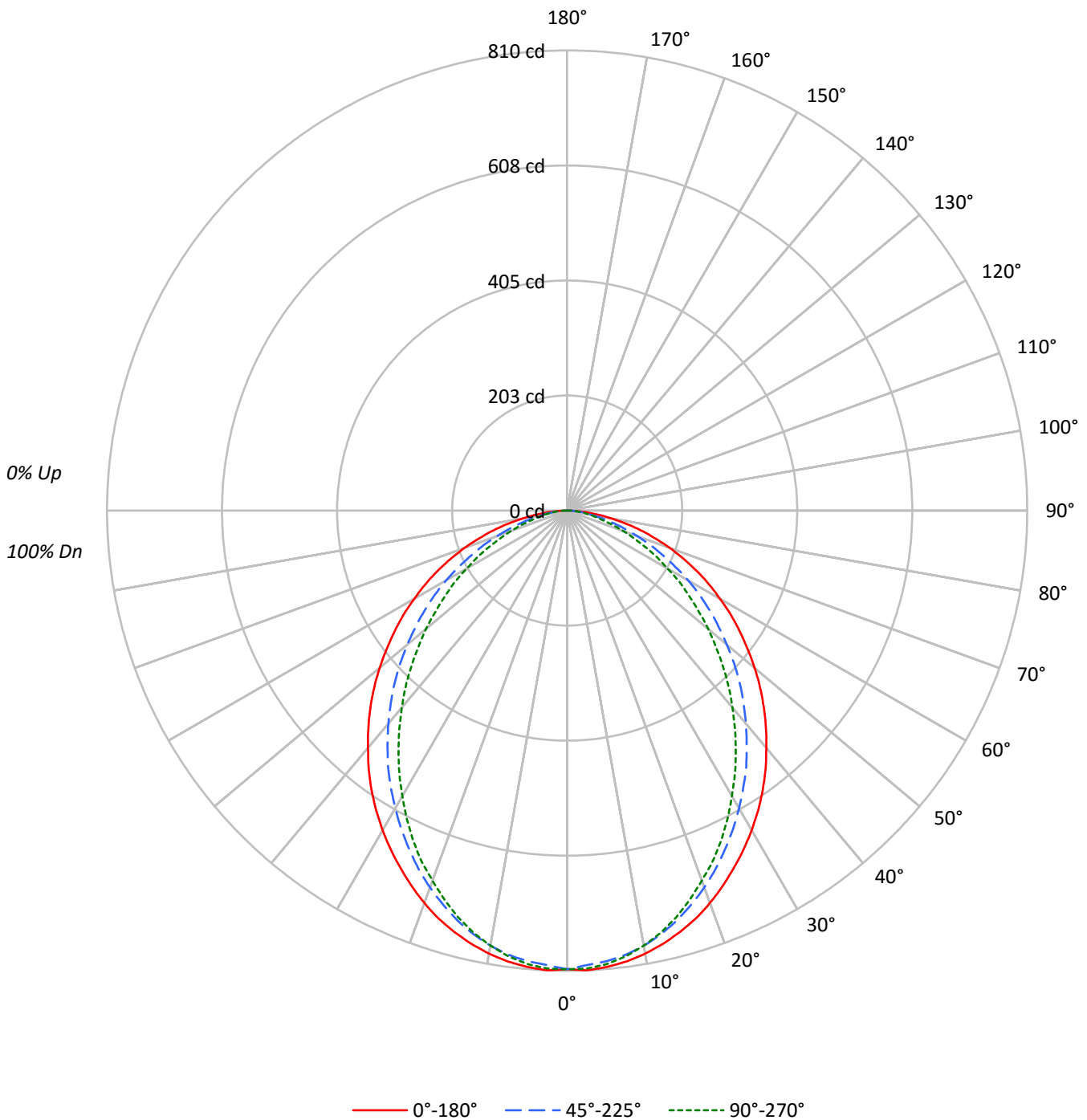
Input Watts (W): 18.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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 | 110 | 105 | 101 | 98 | 107 | 103 | 99 | 96 | 99 | 96 | 93 | 95 | 92 | 90 | 91 | 89 | 87 | | | | | 85 | | | | |
| 2 | 100 | 93 | 86 | 81 | 98 | 91 | 85 | 80 | 87 | 82 | 78 | 84 | 80 | 76 | 81 | 78 | 74 | | | | | 72 | | | | |
| 3 | 92 | 82 | 74 | 68 | 89 | 80 | 73 | 67 | 77 | 71 | 66 | 75 | 69 | 65 | 72 | 68 | 64 | | | | | 62 | | | | |
| 4 | 84 | 73 | 65 | 58 | 82 | 72 | 64 | 58 | 69 | 62 | 57 | 67 | 61 | 56 | 65 | 60 | 56 | | | | | 54 | | | | |
| 5 | 78 | 66 | 57 | 51 | 76 | 65 | 56 | 50 | 62 | 55 | 50 | 61 | 54 | 49 | 59 | 53 | 49 | | | | | 47 | | | | |
| 6 | 72 | 59 | 51 | 45 | 70 | 58 | 50 | 44 | 57 | 49 | 44 | 55 | 49 | 44 | 53 | 48 | 43 | | | | | 41 | | | | |
| 7 | 67 | 54 | 46 | 40 | 65 | 53 | 45 | 40 | 52 | 45 | 39 | 50 | 44 | 39 | 49 | 43 | 39 | | | | | 37 | | | | |
| 8 | 63 | 50 | 41 | 36 | 61 | 49 | 41 | 36 | 48 | 40 | 35 | 46 | 40 | 35 | 45 | 39 | 35 | | | | | 33 | | | | |
| 9 | 59 | 46 | 38 | 32 | 57 | 45 | 37 | 32 | 44 | 37 | 32 | 43 | 36 | 32 | 42 | 36 | 32 | | | | | 30 | | | | |
| 10 | 55 | 42 | 35 | 29 | 54 | 42 | 34 | 29 | 41 | 34 | 29 | 40 | 33 | 29 | 39 | 33 | 29 | | | | | 27 | | | | |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|------|------|------|
| 0° | 6518 | 6518 | 6518 |
| 5° | 6533 | 6453 | 6493 |
| 10° | 6492 | 6375 | 6375 |
| 15° | 6417 | 6242 | 6195 |
| 20° | 6315 | 6065 | 5954 |
| 25° | 6184 | 5859 | 5711 |
| 30° | 6056 | 5642 | 5406 |
| 35° | 5916 | 5416 | 5100 |
| 40° | 5747 | 5160 | 4769 |
| 45° | 5590 | 4906 | 4432 |
| 50° | 5412 | 4612 | 4077 |
| 55° | 5220 | 4307 | 3689 |
| 60° | 5010 | 3974 | 3294 |
| 65° | 4818 | 3555 | 2905 |
| 70° | 4539 | 3094 | 2467 |
| 75° | 4186 | 2564 | 2006 |
| 80° | 3649 | 1953 | 1841 |
| 85° | 3094 | 1778 | 1658 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 75.9 | 4.1 |
| 10°-20° | 211.7 | 11.3 |
| 20°-30° | 305.6 | 16.4 |
| 30°-40° | 346.4 | 18.6 |
| 40°-50° | 334.4 | 17.9 |
| 50°-60° | 278.0 | 14.9 |
| 60°-70° | 191.9 | 10.3 |
| 70°-80° | 97.0 | 5.2 |
| 80°-90° | 24.6 | 1.3 |
| 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° | 593.2 | 31.8 |
| 0°-40° | 939.6 | 50.4 |
| 0°-60° | 1552.1 | 83.2 |
| 0°-90° | 1865.6 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 1865.6 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|-----|-------|-----|-------|-----|------|
| 0° | 807 | 807 | 807 | 807 | 807 | |
| 5° | 806 | 804 | 796 | 802 | 801 | 77 |
| 15° | 768 | 762 | 747 | 746 | 741 | 216 |
| 25° | 694 | 683 | 658 | 647 | 641 | 320 |
| 35° | 600 | 580 | 550 | 529 | 518 | 375 |
| 45° | 490 | 467 | 430 | 399 | 388 | 378 |
| 55° | 371 | 346 | 306 | 274 | 262 | 332 |
| 65° | 252 | 226 | 186 | 160 | 152 | 249 |
| 75° | 134 | 111 | 82 | 68 | 64 | 142 |
| 85° | 33 | 21 | 19 | 18 | 18 | 39 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



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CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|-------|-------|-------|-------|-------|
| 0° | 807.4 | 807.4 | 807.4 | 807.4 | 807.4 |
| 2.5° | 809.9 | 807.4 | 800.6 | 807.4 | 806.8 |
| 5° | 806.2 | 803.7 | 796.3 | 802.4 | 801.2 |
| 7.5° | 800.6 | 798.1 | 788.8 | 793.2 | 791.3 |
| 10° | 791.9 | 788.8 | 777.7 | 780.2 | 777.7 |
| 12.5° | 780.8 | 777.1 | 763.5 | 764.7 | 761.0 |
| 15° | 767.8 | 762.3 | 746.8 | 745.6 | 741.2 |
| 17.5° | 753.0 | 745.0 | 727.0 | 723.9 | 717.8 |
| 20° | 735.1 | 727.0 | 706.0 | 701.1 | 693.0 |
| 22.5° | 715.3 | 706.0 | 683.1 | 675.1 | 668.9 |
| 25° | 694.3 | 683.1 | 657.8 | 647.3 | 641.1 |
| 27.5° | 672.6 | 659.0 | 632.4 | 620.1 | 611.4 |
| 30° | 649.7 | 634.3 | 605.2 | 589.8 | 579.9 |
| 32.5° | 625.6 | 607.7 | 577.4 | 558.9 | 549.6 |
| 35° | 600.3 | 580.5 | 549.6 | 528.6 | 517.5 |
| 37.5° | 573.7 | 553.3 | 519.3 | 496.4 | 485.3 |
| 40° | 545.3 | 524.9 | 489.6 | 463.7 | 452.5 |
| 42.5° | 518.1 | 496.4 | 459.3 | 432.8 | 421.0 |
| 45° | 489.6 | 466.8 | 429.7 | 399.4 | 388.2 |
| 47.5° | 460.6 | 437.1 | 398.8 | 367.2 | 354.9 |
| 50° | 430.9 | 406.8 | 367.2 | 336.3 | 324.6 |
| 52.5° | 400.6 | 377.1 | 336.3 | 304.8 | 292.4 |
| 55° | 370.9 | 346.2 | 306.0 | 273.9 | 262.1 |
| 57.5° | 341.9 | 315.9 | 276.3 | 243.6 | 234.9 |
| 60° | 310.3 | 285.6 | 246.1 | 213.9 | 204.0 |
| 62.5° | 281.9 | 255.9 | 215.1 | 186.1 | 178.7 |
| 65° | 252.2 | 225.7 | 186.1 | 159.5 | 152.1 |
| 67.5° | 221.3 | 196.0 | 158.9 | 135.4 | 126.7 |
| 70° | 192.3 | 166.3 | 131.1 | 110.7 | 104.5 |
| 72.5° | 161.4 | 138.5 | 105.7 | 89.0 | 83.5 |
| 75° | 134.2 | 111.3 | 82.2 | 68.0 | 64.3 |
| 77.5° | 105.7 | 85.9 | 61.2 | 51.3 | 50.1 |
| 80° | 78.5 | 60.6 | 42.0 | 40.2 | 39.6 |
| 82.5° | 55.0 | 38.9 | 30.3 | 29.1 | 28.4 |
| 85° | 33.4 | 21.0 | 19.2 | 17.9 | 17.9 |
| 87.5° | 14.2 | 9.3 | 8.7 | 8.0 | 8.7 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)