

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



Scaled data based on original data using
LM-79-2024 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: NEO-RAY

Report Number: P1061952

Luminaire Tested: S125RDRP-H1270D850-X4F0-XX-UDD-SVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1061952
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-83)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125RDRP-H1270D850-X4F0-XX-UDD-SVL-W
Description: DEFINE 5 WHITE REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE
LOUVER WITH DIFFUSER
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 5000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

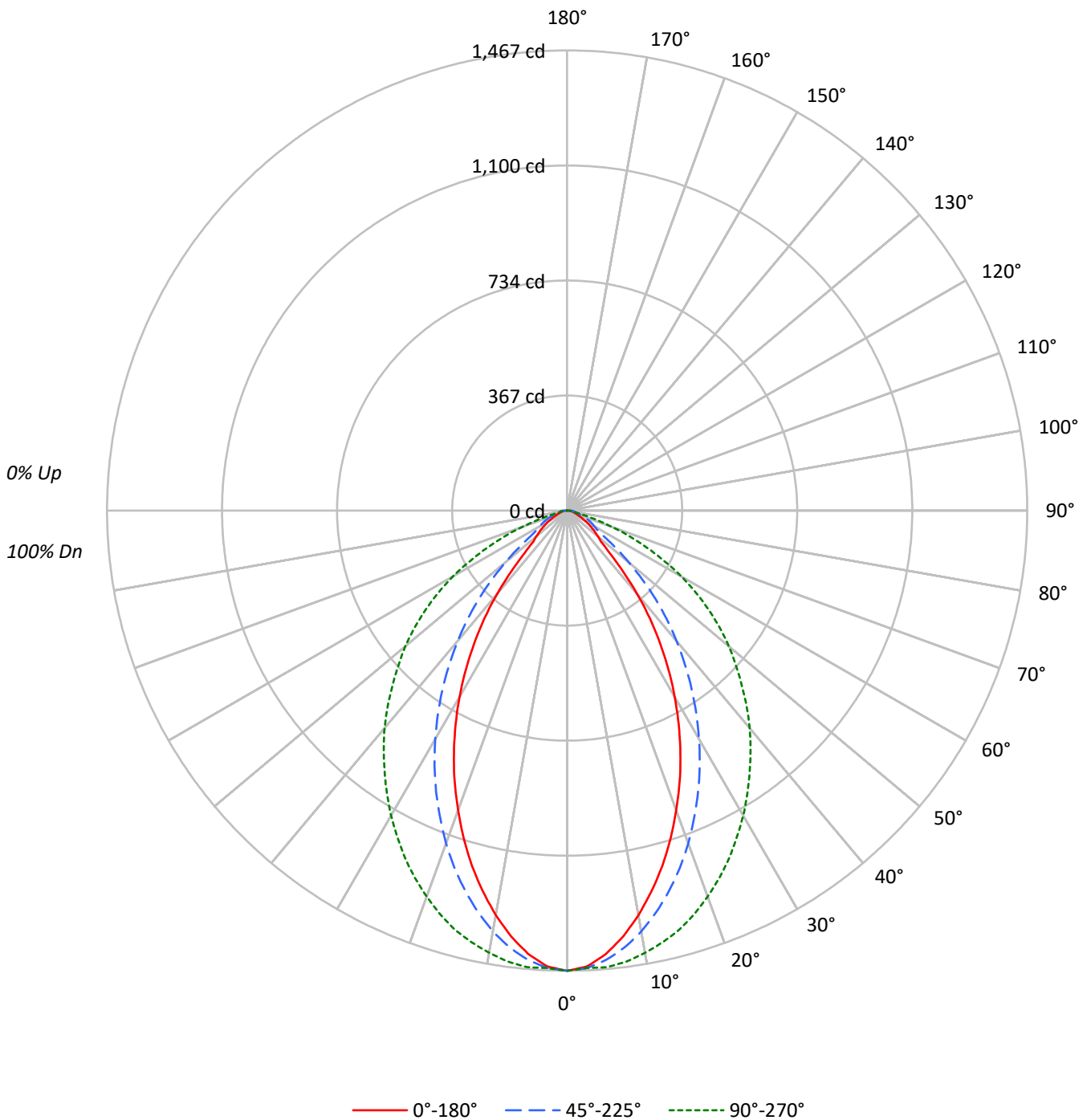
Lumens per Lamp: N/A
Luminaire Lumens: 2125.2 lumens
Efficiency: N/A
Efficacy: 58.2 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 1.15 / 1.02
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 36.5
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: 24 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 | 0 |
| RCR | | | | | | | | | | | | | | | | | | |
| 0 | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | 106 | 106 | 106 | 102 | 102 | 102 | 100 |
| 1 | 111 | 108 | 104 | 101 | 109 | 105 | 103 | 100 | 101 | 99 | 97 | 98 | 96 | 94 | 94 | 92 | 91 | 89 |
| 2 | 104 | 97 | 92 | 87 | 101 | 95 | 90 | 86 | 92 | 88 | 84 | 89 | 85 | 82 | 86 | 83 | 81 | 79 |
| 3 | 96 | 88 | 81 | 76 | 94 | 86 | 80 | 76 | 84 | 79 | 74 | 81 | 77 | 73 | 79 | 75 | 72 | 70 |
| 4 | 90 | 80 | 73 | 67 | 88 | 79 | 72 | 67 | 76 | 71 | 66 | 74 | 69 | 65 | 72 | 68 | 64 | 62 |
| 5 | 84 | 73 | 66 | 60 | 82 | 72 | 65 | 60 | 70 | 64 | 59 | 68 | 63 | 59 | 66 | 62 | 58 | 56 |
| 6 | 78 | 67 | 59 | 54 | 77 | 66 | 59 | 54 | 64 | 58 | 53 | 63 | 57 | 53 | 61 | 56 | 53 | 51 |
| 7 | 73 | 62 | 54 | 49 | 72 | 61 | 54 | 49 | 60 | 53 | 49 | 58 | 53 | 48 | 57 | 52 | 48 | 46 |
| 8 | 69 | 57 | 50 | 45 | 68 | 57 | 50 | 45 | 55 | 49 | 44 | 54 | 48 | 44 | 53 | 48 | 44 | 42 |
| 9 | 65 | 53 | 46 | 41 | 64 | 53 | 46 | 41 | 52 | 45 | 41 | 51 | 45 | 41 | 50 | 44 | 40 | 39 |
| 10 | 61 | 50 | 43 | 38 | 60 | 49 | 42 | 38 | 48 | 42 | 38 | 47 | 42 | 38 | 46 | 41 | 37 | 36 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|-------|-------|-------|
| 0° | 10102 | 10102 | 10102 |
| 5° | 9807 | 9936 | 10098 |
| 10° | 9157 | 9527 | 10008 |
| 15° | 8358 | 8947 | 9858 |
| 20° | 7449 | 8272 | 9596 |
| 25° | 6491 | 7510 | 9287 |
| 30° | 5455 | 6682 | 8925 |
| 35° | 4338 | 5806 | 8531 |
| 40° | 3125 | 4877 | 8142 |
| 45° | 1852 | 3872 | 7667 |
| 50° | 1370 | 2756 | 7215 |
| 55° | 1161 | 1703 | 6607 |
| 60° | 945 | 1374 | 5818 |
| 65° | 736 | 1271 | 4598 |
| 70° | 628 | 1099 | 3076 |
| 75° | 580 | 955 | 1245 |
| 80° | 619 | 987 | 864 |
| 85° | 743 | 1477 | 987 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 7667 cd/sqm

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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 135.2 | 6.4 |
| 10°-20° | 355.2 | 16.7 |
| 20°-30° | 464.2 | 21.8 |
| 30°-40° | 452.2 | 21.3 |
| 40°-50° | 339.2 | 16.0 |
| 50°-60° | 212.6 | 10.0 |
| 60°-70° | 110.7 | 5.2 |
| 70°-80° | 40.0 | 1.9 |
| 80°-90° | 15.9 | 0.7 |
| 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° | 954.6 | 44.9 |
| 0°-40° | 1406.8 | 66.2 |
| 0°-60° | 1958.6 | 92.2 |
| 0°-90° | 2125.2 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 2125.2 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|------|-------|------|-------|------|------|
| 0° | 1467 | 1467 | 1467 | 1467 | 1467 | |
| 5° | 1419 | 1438 | 1438 | 1448 | 1461 | 132 |
| 15° | 1172 | 1207 | 1255 | 1333 | 1383 | 327 |
| 25° | 854 | 901 | 988 | 1123 | 1222 | 390 |
| 35° | 516 | 571 | 691 | 875 | 1015 | 321 |
| 45° | 190 | 246 | 398 | 614 | 787 | 160 |
| 55° | 97 | 101 | 142 | 371 | 550 | 86 |
| 65° | 45 | 48 | 78 | 150 | 282 | 47 |
| 75° | 22 | 30 | 36 | 37 | 47 | 24 |
| 85° | 9 | 16 | 19 | 17 | 12 | 10 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P1061952

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CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|--------|--------|--------|--------|--------|
| 0° | 1467.2 | 1467.2 | 1467.2 | 1467.2 | 1467.2 |
| 2.5° | 1454.7 | 1468.8 | 1459.4 | 1459.4 | 1459.4 |
| 5° | 1418.9 | 1437.6 | 1437.6 | 1448.5 | 1461.0 |
| 7.5° | 1369.0 | 1390.8 | 1404.8 | 1431.4 | 1450.1 |
| 10° | 1309.7 | 1336.2 | 1362.7 | 1406.4 | 1431.4 |
| 12.5° | 1242.7 | 1273.9 | 1311.3 | 1372.1 | 1409.5 |
| 15° | 1172.5 | 1206.8 | 1255.2 | 1333.1 | 1383.0 |
| 17.5° | 1096.1 | 1136.7 | 1194.4 | 1287.9 | 1348.7 |
| 20° | 1016.6 | 1057.1 | 1128.9 | 1234.9 | 1309.7 |
| 22.5° | 937.1 | 980.7 | 1058.7 | 1178.8 | 1267.6 |
| 25° | 854.4 | 901.2 | 988.5 | 1122.6 | 1222.4 |
| 27.5° | 770.2 | 818.6 | 915.3 | 1064.9 | 1172.5 |
| 30° | 686.1 | 735.9 | 840.4 | 1002.6 | 1122.6 |
| 32.5° | 601.9 | 654.9 | 765.6 | 938.6 | 1069.6 |
| 35° | 516.1 | 570.7 | 690.7 | 874.7 | 1015.0 |
| 37.5° | 433.5 | 488.0 | 615.9 | 809.2 | 960.5 |
| 40° | 347.7 | 407.0 | 542.6 | 743.7 | 905.9 |
| 42.5° | 263.5 | 324.3 | 469.3 | 678.3 | 846.6 |
| 45° | 190.2 | 246.4 | 397.6 | 614.3 | 787.4 |
| 47.5° | 146.6 | 177.7 | 324.3 | 548.8 | 729.7 |
| 50° | 127.9 | 137.2 | 257.3 | 488.0 | 673.6 |
| 52.5° | 110.7 | 116.9 | 193.3 | 431.9 | 612.8 |
| 55° | 96.7 | 101.3 | 141.9 | 371.1 | 550.4 |
| 57.5° | 81.1 | 87.3 | 112.3 | 311.8 | 486.5 |
| 60° | 68.6 | 71.7 | 99.8 | 257.3 | 422.5 |
| 62.5° | 56.1 | 59.2 | 88.9 | 202.7 | 350.8 |
| 65° | 45.2 | 48.3 | 78.0 | 149.7 | 282.2 |
| 67.5° | 37.4 | 39.0 | 65.5 | 106.0 | 216.7 |
| 70° | 31.2 | 32.7 | 54.6 | 73.3 | 152.8 |
| 72.5° | 26.5 | 31.2 | 43.7 | 53.0 | 96.7 |
| 75° | 21.8 | 29.6 | 35.9 | 37.4 | 46.8 |
| 77.5° | 18.7 | 28.1 | 29.6 | 29.6 | 26.5 |
| 80° | 15.6 | 23.4 | 24.9 | 23.4 | 21.8 |
| 82.5° | 12.5 | 18.7 | 20.3 | 20.3 | 17.2 |
| 85° | 9.4 | 15.6 | 18.7 | 17.2 | 12.5 |
| 87.5° | 6.2 | 14.0 | 15.6 | 14.0 | 9.4 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |



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CIE UGR TABLE:

| Reflectances: | | | | | | | | | | | |
|-----------------|------|------------------|-------|-------|-------|-------|----------------|-------|-------|-------|-------|
| Ceiling | | 0.7 | 0.7 | 0.5 | 0.5 | 0.3 | 0.7 | 0.7 | 0.5 | 0.5 | 0.3 |
| Wall | | 0.5 | 0.3 | 0.5 | 0.3 | 0.3 | 0.5 | 0.3 | 0.5 | 0.3 | 0.3 |
| Reference plane | | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 |
| Room dimensions | | Viewed crosswise | | | | | Viewed endwise | | | | |
| X=2H | Y=2H | 7.95 | 9.30 | 8.32 | 9.62 | 9.93 | 17.56 | 18.92 | 17.93 | 19.23 | 19.54 |
| | 3H | 8.81 | 10.01 | 9.19 | 10.34 | 10.70 | 18.41 | 19.61 | 18.78 | 19.94 | 20.30 |
| | 4H | 9.23 | 10.35 | 9.64 | 10.70 | 11.09 | 18.48 | 19.60 | 18.88 | 19.95 | 20.33 |
| | 6H | 9.66 | 10.69 | 10.08 | 11.06 | 11.45 | 18.46 | 19.49 | 18.88 | 19.86 | 20.26 |
| | 8H | 9.84 | 10.82 | 10.27 | 11.21 | 11.61 | 18.45 | 19.43 | 18.88 | 19.82 | 20.22 |
| | 12H | 10.00 | 10.94 | 10.44 | 11.32 | 11.75 | 18.44 | 19.37 | 18.87 | 19.75 | 20.18 |
| 4H | 2H | 8.92 | 10.04 | 9.32 | 10.39 | 10.77 | 17.43 | 18.55 | 17.83 | 18.90 | 19.28 |
| | 3H | 9.97 | 10.89 | 10.38 | 11.29 | 11.69 | 18.34 | 19.26 | 18.75 | 19.66 | 20.06 |
| | 4H | 10.53 | 11.35 | 10.96 | 11.77 | 12.21 | 18.44 | 19.26 | 18.88 | 19.68 | 20.12 |
| | 6H | 11.13 | 11.84 | 11.59 | 12.28 | 12.75 | 18.47 | 19.18 | 18.93 | 19.62 | 20.09 |
| | 8H | 11.37 | 12.03 | 11.84 | 12.48 | 12.95 | 18.47 | 19.13 | 18.94 | 19.58 | 20.05 |
| | 12H | 11.60 | 12.18 | 12.08 | 12.66 | 13.14 | 18.48 | 19.07 | 18.97 | 19.55 | 20.02 |
| 8H | 4H | 11.00 | 11.66 | 11.47 | 12.11 | 12.58 | 18.37 | 19.03 | 18.83 | 19.47 | 19.94 |
| | 6H | 11.82 | 12.36 | 12.32 | 12.85 | 13.33 | 18.42 | 18.96 | 18.92 | 19.46 | 19.94 |
| | 8H | 12.20 | 12.68 | 12.72 | 13.20 | 13.69 | 18.45 | 18.94 | 18.97 | 19.45 | 19.95 |
| | 12H | 12.59 | 13.02 | 13.10 | 13.51 | 14.08 | 18.52 | 18.95 | 19.03 | 19.44 | 20.01 |
| 12H | 4H | 11.05 | 11.64 | 11.54 | 12.12 | 12.59 | 18.33 | 18.92 | 18.82 | 19.40 | 19.87 |
| | 6H | 11.94 | 12.42 | 12.46 | 12.94 | 13.43 | 18.39 | 18.87 | 18.91 | 19.39 | 19.88 |
| | 8H | 12.43 | 12.86 | 12.94 | 13.35 | 13.92 | 18.46 | 18.89 | 18.97 | 19.38 | 19.95 |