

Scaled data based on original data using  
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-  
State Lighting Products

Test Report Prepared for  
Cooper Lighting Solutions

Brand: NEO-RAY

Report Number: P1030929

Luminaire Tested: S123DIW-B560D755UB2750-4F0-XX-W2A-D1\_5000K

Issue Date: 5/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1030929  
REPORT IS A COMBINATION OF REPORTS P991789 AND P1007351  
Test Lab: INNOVATION CENTER  
Issue Date: 5/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S123DIW-B560D755UB2750-4F0-XX-W2A-D1\_5000K  
Description: Define 3 Direct/Indirect Wall Mount with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}  
Light Source: -  
Ballast/Driver: -

**Summary**

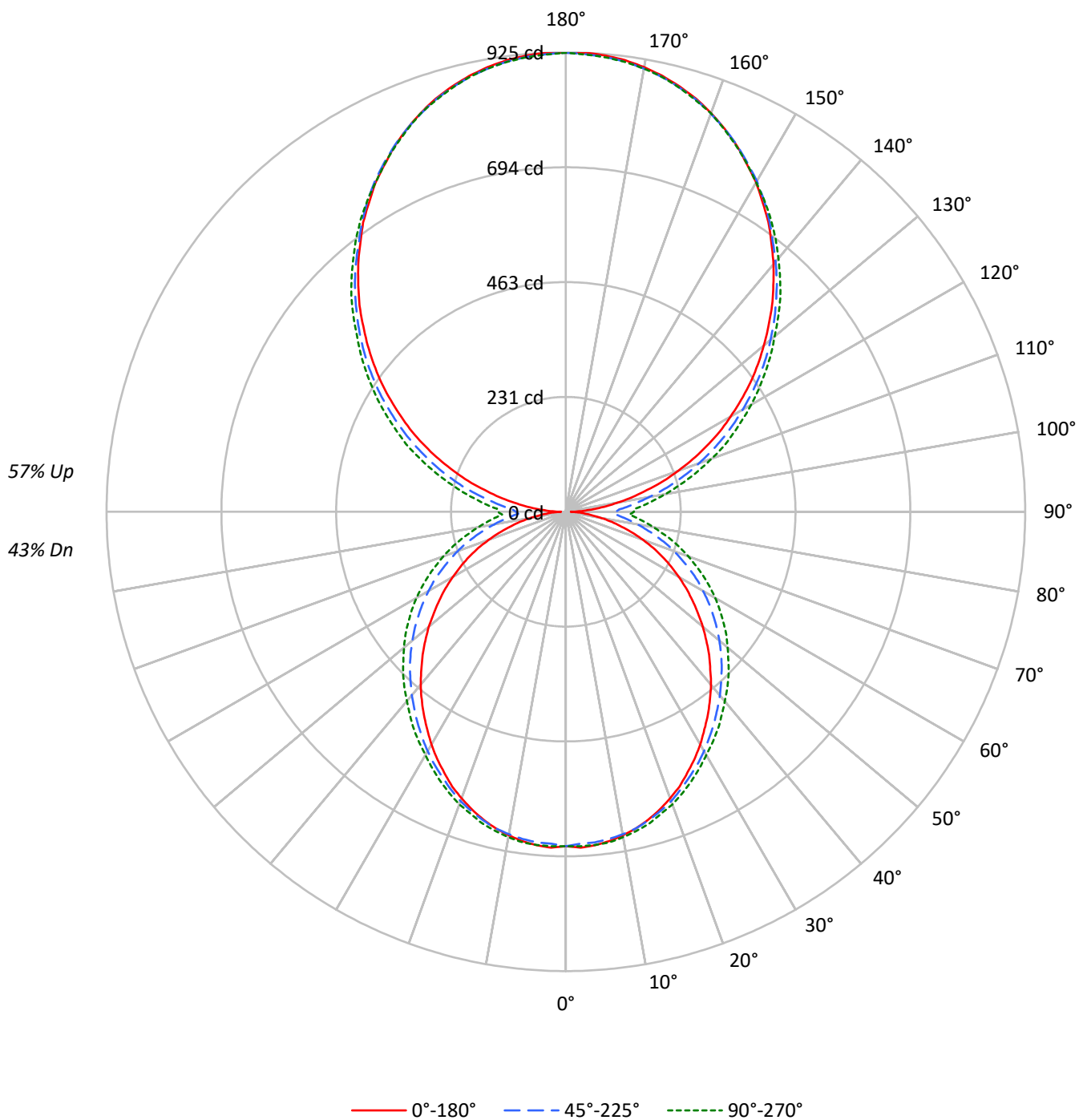
Lumens per Lamp: N/A  
Luminaire Lumens: 4826.0 lumens  
Efficiency: N/A  
Efficacy: 102.2 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.25 / 1.37  
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')  
CIE Type: General Diffuse

Input Watts (W): 47.2  
Input Voltage (V):  
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: 24 FT

TEST NUMBER: P1030929

CATALOG NUMBER: S123DIW-B560D755UB2750-4F0-XX-W2A-D1\_5000K

### Luminous Intensity Polar Plot



TEST NUMBER: P1030929

CATALOG NUMBER: S123DIW-B560D755UB2750-4F0-XX-W2A-D1\_5000K

**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

|     |     |     |     |     |    |    |    |    |    |    |    |    |    |    |    |    |    |
|-----|-----|-----|-----|-----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| RF  | 20  |     |     |     | 20 |    |    |    | 20 |    |    |    | 20 |    |    |    | 20 |
| RC  | 80  |     |     |     | 70 |    |    |    | 50 |    |    |    | 30 |    |    |    | 10 |
| RW  | 70  | 50  | 30  | 10  | 70 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 |
| RCR |     |     |     |     |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 0   | 105 | 105 | 105 | 105 | 96 | 96 | 96 | 96 | 79 | 79 | 79 | 64 | 64 | 64 | 50 | 50 | 50 |
| 1   | 95  | 91  | 86  | 83  | 87 | 83 | 79 | 76 | 68 | 66 | 63 | 55 | 53 | 51 | 42 | 41 | 40 |
| 2   | 86  | 79  | 72  | 67  | 79 | 72 | 66 | 62 | 59 | 55 | 52 | 48 | 45 | 42 | 37 | 35 | 33 |
| 3   | 79  | 69  | 61  | 55  | 71 | 63 | 56 | 51 | 52 | 47 | 43 | 42 | 38 | 35 | 32 | 30 | 28 |
| 4   | 72  | 61  | 53  | 46  | 65 | 56 | 48 | 43 | 46 | 41 | 36 | 37 | 33 | 30 | 29 | 26 | 24 |
| 5   | 66  | 54  | 46  | 39  | 60 | 49 | 42 | 37 | 41 | 35 | 31 | 33 | 29 | 26 | 26 | 23 | 20 |
| 6   | 60  | 48  | 40  | 34  | 55 | 44 | 37 | 32 | 37 | 31 | 27 | 30 | 26 | 22 | 23 | 20 | 18 |
| 7   | 56  | 43  | 35  | 30  | 51 | 40 | 33 | 28 | 33 | 28 | 24 | 27 | 23 | 20 | 21 | 18 | 16 |
| 8   | 52  | 39  | 31  | 26  | 47 | 36 | 29 | 24 | 30 | 25 | 21 | 25 | 21 | 17 | 19 | 16 | 14 |
| 9   | 48  | 36  | 28  | 23  | 44 | 33 | 26 | 22 | 28 | 22 | 19 | 23 | 19 | 16 | 18 | 15 | 13 |
| 10  | 45  | 33  | 25  | 21  | 41 | 30 | 24 | 19 | 25 | 20 | 17 | 21 | 17 | 14 | 17 | 14 | 12 |

**AVERAGE LUMINANCE (cd/sqm):**

|     | 0°   | 45°  | 90°  |
|-----|------|------|------|
| 0°  | 7248 | 7248 | 7248 |
| 5°  | 7268 | 7035 | 7030 |
| 10° | 7200 | 6845 | 6793 |
| 15° | 7104 | 6634 | 6541 |
| 20° | 6969 | 6400 | 6270 |
| 25° | 6803 | 6136 | 5991 |
| 30° | 6632 | 5896 | 5710 |
| 35° | 6442 | 5646 | 5482 |
| 40° | 6259 | 5416 | 5239 |
| 45° | 6056 | 5195 | 5041 |
| 50° | 5856 | 4974 | 4824 |
| 55° | 5635 | 4748 | 4626 |
| 60° | 5419 | 4518 | 4422 |
| 65° | 5195 | 4272 | 4183 |
| 70° | 4859 | 3996 | 3937 |
| 75° | 4435 | 3681 | 3684 |
| 80° | 3941 | 3363 | 3395 |
| 85° | 3448 | 3105 | 3187 |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
Vertical Angle: 45°  
Luminance: 6056 cd/sqm

TEST NUMBER: P1030929

CATALOG NUMBER: S123DIW-B560D755UB2750-4F0-XX-W2A-D1\_5000K

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 63.9   | 1.3       |
| 10°-20°   | 182.1  | 3.8       |
| 20°-30°   | 272.3  | 5.6       |
| 30°-40°   | 325.1  | 6.7       |
| 40°-50°   | 340.2  | 7.0       |
| 50°-60°   | 319.2  | 6.6       |
| 60°-70°   | 266.6  | 5.5       |
| 70°-80°   | 190.7  | 4.0       |
| 80°-90°   | 115.4  | 2.4       |
| 90°-100°  | 130.8  | 2.7       |
| 100°-110° | 232.5  | 4.8       |
| 110°-120° | 341.6  | 7.1       |
| 120°-130° | 423.3  | 8.8       |
| 130°-140° | 462.3  | 9.6       |
| 140°-150° | 447.6  | 9.3       |
| 150°-160° | 375.2  | 7.8       |
| 160°-170° | 249.8  | 5.2       |
| 170°-180° | 87.5   | 1.8       |
| 0°-30°    | 518.3  | 10.7      |
| 0°-40°    | 843.4  | 17.5      |
| 0°-60°    | 1502.8 | 31.1      |
| 0°-90°    | 2075.5 | 43.0      |
| 90°-120°  | 704.8  | 14.6      |
| 90°-150°  | 2038.0 | 42.2      |
| 90°-180°  | 2751.0 | 57.0      |
| 0°-180°   | 4826.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|      | 0°  | 22.5° | 45° | 67.5° | 90° | Flux |
|------|-----|-------|-----|-------|-----|------|
| 0°   | 673 | 673   | 673 | 673   | 673 |      |
| 5°   | 674 | 673   | 668 | 674   | 673 | 64   |
| 15°  | 642 | 644   | 643 | 651   | 650 | 181  |
| 25°  | 580 | 587   | 589 | 598   | 598 | 267  |
| 35°  | 499 | 510   | 520 | 531   | 534 | 312  |
| 45°  | 408 | 425   | 444 | 458   | 464 | 314  |
| 55°  | 311 | 335   | 362 | 381   | 387 | 278  |
| 65°  | 215 | 244   | 276 | 298   | 305 | 212  |
| 75°  | 117 | 151   | 188 | 212   | 221 | 125  |
| 85°  | 36  | 73    | 112 | 136   | 144 | 37   |
| 90°  | 10  | 54    | 100 | 128   | 137 | 10   |
| 95°  | 51  | 85    | 126 | 152   | 159 | 53   |
| 105° | 169 | 188   | 226 | 247   | 255 | 181  |
| 115° | 312 | 323   | 348 | 366   | 372 | 309  |
| 125° | 454 | 456   | 476 | 488   | 490 | 405  |
| 135° | 587 | 591   | 598 | 609   | 611 | 453  |
| 145° | 712 | 712   | 714 | 720   | 720 | 444  |
| 155° | 814 | 814   | 815 | 818   | 812 | 375  |
| 165° | 886 | 884   | 884 | 889   | 884 | 250  |
| 175° | 922 | 919   | 919 | 924   | 918 | 88   |
| 180° | 924 | 924   | 924 | 924   | 924 |      |

TEST NUMBER: P1030929

CATALOG NUMBER: S123DIW-B560D755UB2750-4F0-XX-W2A-D1\_5000K

**CANDELA DISTRIBUTION (FULL):**

|        | 0°    | 22.5° | 45°   | 67.5° | 90°   |
|--------|-------|-------|-------|-------|-------|
| 0°     | 673.4 | 673.4 | 673.4 | 673.4 | 673.4 |
| 2.5°   | 677.0 | 674.8 | 669.0 | 674.8 | 674.1 |
| 5°     | 674.1 | 672.6 | 668.2 | 674.1 | 673.4 |
| 7.5°   | 669.0 | 669.0 | 664.6 | 671.9 | 671.2 |
| 10°    | 661.6 | 663.1 | 659.4 | 666.8 | 665.3 |
| 12.5°  | 652.8 | 655.0 | 652.8 | 659.4 | 658.0 |
| 15°    | 641.8 | 644.0 | 643.3 | 650.6 | 649.9 |
| 17.5°  | 628.6 | 633.0 | 632.3 | 638.9 | 637.4 |
| 20°    | 613.9 | 618.3 | 619.8 | 626.4 | 627.1 |
| 22.5°  | 598.5 | 602.9 | 605.1 | 613.9 | 613.2 |
| 25°    | 579.5 | 586.8 | 589.0 | 598.5 | 598.5 |
| 27.5°  | 561.1 | 569.2 | 573.6 | 581.7 | 582.4 |
| 30°    | 541.3 | 550.9 | 556.7 | 565.5 | 565.5 |
| 32.5°  | 519.3 | 530.3 | 538.4 | 547.9 | 550.1 |
| 35°    | 498.8 | 510.5 | 520.1 | 531.1 | 534.0 |
| 37.5°  | 476.8 | 490.0 | 501.0 | 513.5 | 515.7 |
| 40°    | 454.8 | 468.0 | 482.6 | 495.1 | 498.0 |
| 42.5°  | 430.6 | 447.4 | 462.8 | 476.8 | 481.2 |
| 45°    | 407.8 | 425.4 | 443.8 | 457.7 | 463.6 |
| 47.5°  | 383.6 | 403.4 | 424.0 | 439.4 | 443.8 |
| 50°    | 360.1 | 380.7 | 403.4 | 420.3 | 425.4 |
| 52.5°  | 335.2 | 357.2 | 382.9 | 400.5 | 407.1 |
| 55°    | 311.0 | 335.2 | 361.6 | 381.4 | 387.3 |
| 57.5°  | 287.5 | 312.5 | 341.1 | 360.9 | 367.5 |
| 60°    | 262.6 | 289.0 | 319.1 | 339.6 | 347.7 |
| 62.5°  | 239.1 | 266.3 | 298.5 | 319.1 | 326.4 |
| 65°    | 214.9 | 243.5 | 275.8 | 297.8 | 305.1 |
| 67.5°  | 190.7 | 220.8 | 253.1 | 277.3 | 283.1 |
| 70°    | 165.0 | 196.6 | 231.8 | 255.3 | 262.6 |
| 72.5°  | 141.6 | 173.1 | 209.8 | 234.0 | 241.3 |
| 75°    | 116.6 | 151.1 | 187.8 | 212.0 | 220.8 |
| 77.5°  | 95.4  | 129.8 | 166.5 | 192.2 | 198.8 |
| 80°    | 72.6  | 108.6 | 146.7 | 171.6 | 179.0 |
| 82.5°  | 52.8  | 89.5  | 128.4 | 153.3 | 160.6 |
| 85°    | 35.9  | 72.6  | 111.5 | 136.4 | 143.8 |
| 87.5°  | 22.0  | 58.7  | 96.1  | 121.0 | 128.4 |
| 90°    | 10.2  | 53.5  | 100.3 | 128.1 | 137.0 |
| 92.5°  | 30.6  | 66.4  | 107.5 | 133.9 | 139.0 |
| 95°    | 50.9  | 84.6  | 126.3 | 152.0 | 159.3 |
| 97.5°  | 77.7  | 107.8 | 146.6 | 172.2 | 178.9 |
| 100°   | 105.3 | 133.2 | 170.5 | 194.0 | 202.8 |
| 102.5° | 137.3 | 160.0 | 198.1 | 220.9 | 227.4 |
| 105°   | 169.3 | 188.3 | 226.4 | 247.0 | 255.0 |
| 107.5° | 206.2 | 222.3 | 255.4 | 277.3 | 283.2 |
| 110°   | 240.4 | 255.0 | 285.8 | 307.8 | 312.2 |

TEST NUMBER: P1030929

CATALOG NUMBER: S123DIW-B560D755UB2750-4F0-XX-W2A-D1\_5000K

**CANDELA DISTRIBUTION (continued):**

|        | 0°    | 22.5° | 45°   | 67.5° | 90°   |
|--------|-------|-------|-------|-------|-------|
| 112.5° | 276.7 | 287.7 | 315.5 | 337.5 | 344.1 |
| 115°   | 312.3 | 323.3 | 348.2 | 366.5 | 371.6 |
| 117.5° | 349.3 | 355.8 | 379.4 | 397.0 | 400.6 |
| 120°   | 382.6 | 390.7 | 411.3 | 427.4 | 431.1 |
| 122.5° | 418.2 | 422.6 | 443.9 | 457.9 | 460.8 |
| 125°   | 453.8 | 456.0 | 475.8 | 488.3 | 490.5 |
| 127.5° | 487.2 | 490.9 | 507.7 | 518.1 | 520.3 |
| 130°   | 520.6 | 525.7 | 538.1 | 549.2 | 548.6 |
| 132.5° | 553.3 | 559.1 | 568.7 | 578.2 | 579.7 |
| 135°   | 587.4 | 591.0 | 598.4 | 608.7 | 610.9 |
| 137.5° | 618.7 | 621.5 | 628.9 | 636.9 | 638.5 |
| 140°   | 650.5 | 654.2 | 657.1 | 667.4 | 666.0 |
| 142.5° | 680.3 | 683.2 | 684.7 | 693.5 | 693.5 |
| 145°   | 711.5 | 712.3 | 714.5 | 719.6 | 719.6 |
| 147.5° | 737.7 | 740.6 | 742.8 | 745.0 | 743.5 |
| 150°   | 766.0 | 767.5 | 768.9 | 768.9 | 766.1 |
| 152.5° | 789.2 | 791.4 | 792.1 | 793.6 | 790.0 |
| 155°   | 813.9 | 813.9 | 814.7 | 817.6 | 812.5 |
| 157.5° | 835.0 | 834.3 | 835.0 | 837.9 | 833.5 |
| 160°   | 854.6 | 853.1 | 853.1 | 856.8 | 853.9 |
| 162.5° | 872.0 | 869.8 | 870.6 | 874.2 | 869.1 |
| 165°   | 886.5 | 884.4 | 884.4 | 888.7 | 883.6 |
| 167.5° | 898.9 | 896.0 | 896.7 | 901.1 | 896.7 |
| 170°   | 909.0 | 906.1 | 906.1 | 911.2 | 906.1 |
| 172.5° | 917.0 | 914.1 | 914.1 | 918.5 | 913.4 |
| 175°   | 922.1 | 919.2 | 919.2 | 923.6 | 918.5 |
| 177.5° | 925.0 | 922.1 | 922.1 | 926.5 | 921.4 |
| 180°   | 924.3 | 924.3 | 924.3 | 924.3 | 924.3 |

(END OF REPORT)