

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: P1028196

Luminaire Tested: S125DIP-B850D1090UB27-4F0-XX-W2A-D1

Issue Date: 5/6/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1028196  
REPORT IS A COMBINATION OF REPORTS P1002423 AND P1007351  
Test Lab: INNOVATION CENTER  
Issue Date: 5/6/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S125DIP-B850D1090UB27-4F0-XX-W2A-D1  
Description: Define 5 Direct/Indirect Pendant with 2700K BioUP LEDs {m-DER=0.473} {m-EER=0.52}  
Light Source: -  
Ballast/Driver: -

**Summary**

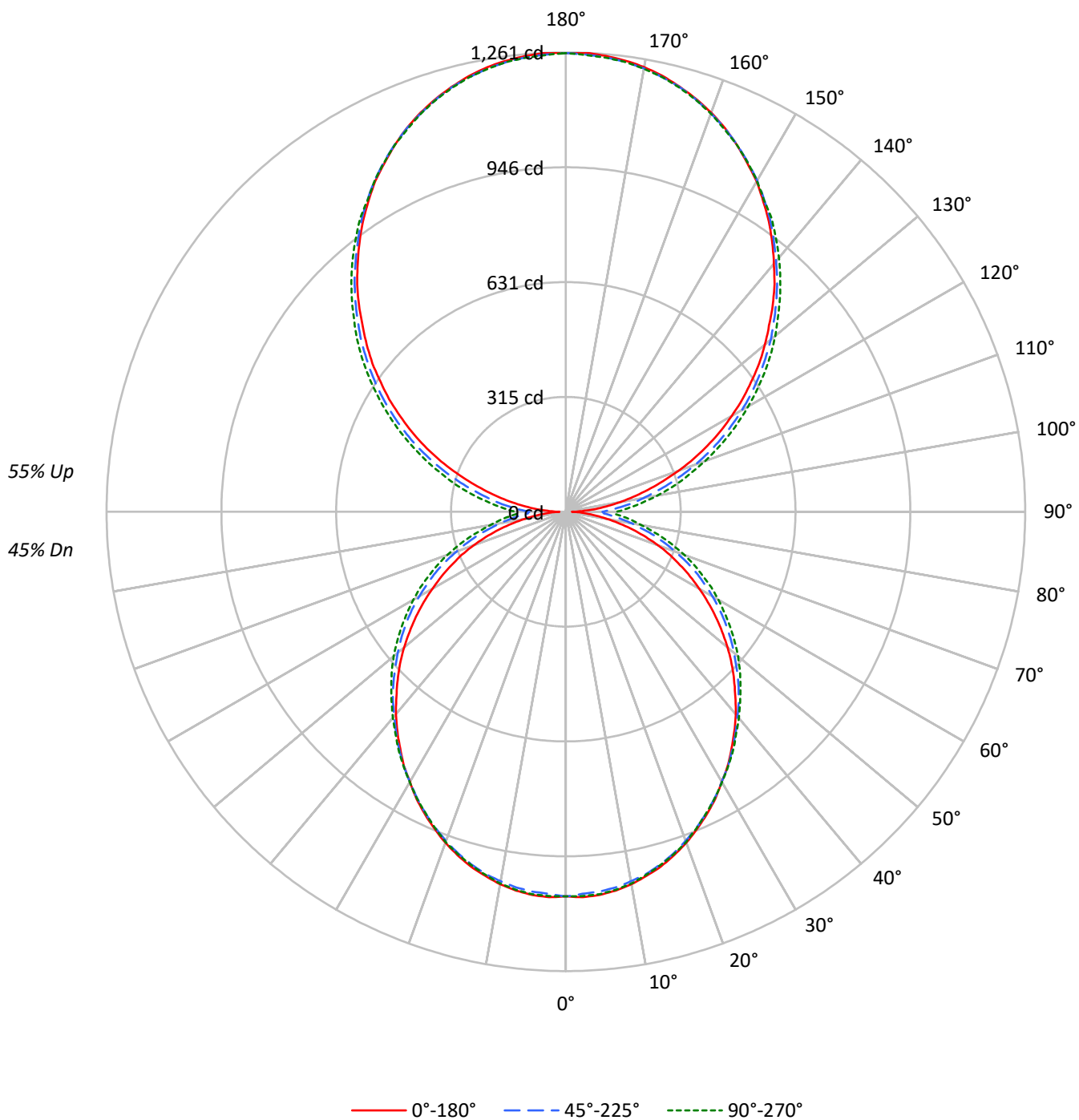
Lumens per Lamp: N/A  
Luminaire Lumens: 6787.0 lumens  
Efficiency: N/A  
Efficacy: 105.4 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.21 / 1.34  
Luminous Opening: Rectangular w/ Sides (W: 0.42' x L: 4' x H: 0.1')  
CIE Type: General Diffuse

Input Watts (W): 64.4  
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

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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 |
| RW  | 70  | 50  | 30  | 10  | 70 | 50 | 30 | 10 | 50 | 30 | 10 |  | 50 | 30 | 10 |  | 50 |
| RCR |     |     |     |     |    |    |    |    |    |    |    |  |    |    |    |  |    |
| 0   | 106 | 106 | 106 | 106 | 97 | 97 | 97 | 97 | 81 | 81 | 81 |  | 66 | 66 | 66 |  | 52 |
| 1   | 96  | 91  | 87  | 84  | 88 | 84 | 80 | 77 | 70 | 67 | 65 |  | 57 | 55 | 53 |  | 45 |
| 2   | 87  | 79  | 73  | 68  | 80 | 73 | 67 | 63 | 61 | 57 | 53 |  | 49 | 46 | 44 |  | 39 |
| 3   | 79  | 70  | 62  | 56  | 72 | 64 | 57 | 52 | 53 | 48 | 44 |  | 43 | 40 | 37 |  | 34 |
| 4   | 72  | 61  | 53  | 47  | 66 | 57 | 49 | 44 | 47 | 42 | 38 |  | 39 | 35 | 31 |  | 31 |
| 5   | 66  | 55  | 46  | 40  | 61 | 50 | 43 | 38 | 42 | 37 | 32 |  | 35 | 30 | 27 |  | 27 |
| 6   | 61  | 49  | 41  | 35  | 56 | 45 | 38 | 33 | 38 | 32 | 28 |  | 31 | 27 | 24 |  | 25 |
| 7   | 56  | 44  | 36  | 30  | 52 | 41 | 34 | 28 | 34 | 29 | 25 |  | 28 | 24 | 21 |  | 23 |
| 8   | 52  | 40  | 32  | 27  | 48 | 37 | 30 | 25 | 31 | 26 | 22 |  | 26 | 22 | 18 |  | 21 |
| 9   | 49  | 36  | 29  | 24  | 45 | 34 | 27 | 22 | 29 | 23 | 19 |  | 24 | 20 | 17 |  | 19 |
| 10  | 45  | 33  | 26  | 21  | 42 | 31 | 24 | 20 | 26 | 21 | 17 |  | 22 | 18 | 15 |  | 18 |

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

|     | 0°   | 45°  | 90°  |
|-----|------|------|------|
| 0°  | 6765 | 6765 | 6765 |
| 5°  | 6776 | 6623 | 6639 |
| 10° | 6725 | 6488 | 6470 |
| 15° | 6644 | 6331 | 6261 |
| 20° | 6533 | 6141 | 6054 |
| 25° | 6402 | 5939 | 5803 |
| 30° | 6244 | 5719 | 5575 |
| 35° | 6096 | 5516 | 5365 |
| 40° | 5945 | 5302 | 5152 |
| 45° | 5774 | 5117 | 4963 |
| 50° | 5611 | 4916 | 4791 |
| 55° | 5415 | 4723 | 4591 |
| 60° | 5200 | 4505 | 4386 |
| 65° | 4976 | 4274 | 4156 |
| 70° | 4719 | 3966 | 3916 |
| 75° | 4313 | 3660 | 3623 |
| 80° | 3781 | 3289 | 3298 |
| 85° | 3253 | 2993 | 3129 |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 5774 cd/sqm

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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 99.9   | 1.5       |
| 10°-20°   | 283.6  | 4.2       |
| 20°-30°   | 421.8  | 6.2       |
| 30°-40°   | 499.5  | 7.4       |
| 40°-50°   | 516.4  | 7.6       |
| 50°-60°   | 475.7  | 7.0       |
| 60°-70°   | 384.6  | 5.7       |
| 70°-80°   | 257.3  | 3.8       |
| 80°-90°   | 135.0  | 2.0       |
| 90°-100°  | 158.7  | 2.3       |
| 100°-110° | 304.0  | 4.5       |
| 110°-120° | 458.8  | 6.8       |
| 120°-130° | 576.3  | 8.5       |
| 130°-140° | 631.5  | 9.3       |
| 140°-150° | 611.8  | 9.0       |
| 150°-160° | 512.4  | 7.5       |
| 160°-170° | 340.6  | 5.0       |
| 170°-180° | 119.2  | 1.8       |
| 0°-30°    | 805.4  | 11.9      |
| 0°-40°    | 1304.9 | 19.2      |
| 0°-60°    | 2297.1 | 33.8      |
| 0°-90°    | 3073.9 | 45.3      |
| 90°-120°  | 921.4  | 13.6      |
| 90°-150°  | 2740.9 | 40.4      |
| 90°-180°  | 3713.0 | 54.7      |
| 0°-180°   | 6787.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|      | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|------|------|-------|------|-------|------|------|
| 0°   | 1056 | 1056  | 1056 | 1056  | 1056 |      |
| 5°   | 1056 | 1054  | 1047 | 1055  | 1054 | 100  |
| 15°  | 1008 | 1009  | 1002 | 1008  | 1004 | 284  |
| 25°  | 916  | 919   | 913  | 917   | 912  | 422  |
| 35°  | 793  | 800   | 797  | 800   | 800  | 496  |
| 45°  | 653  | 665   | 670  | 677   | 678  | 504  |
| 55°  | 502  | 519   | 535  | 547   | 551  | 449  |
| 65°  | 346  | 370   | 394  | 410   | 414  | 343  |
| 75°  | 190  | 217   | 250  | 271   | 276  | 202  |
| 85°  | 57   | 91    | 127  | 150   | 158  | 59   |
| 90°  | 18   | 58    | 101  | 129   | 139  | 16   |
| 95°  | 77   | 106   | 151  | 181   | 190  | 77   |
| 105° | 233  | 254   | 291  | 318   | 328  | 248  |
| 115° | 428  | 440   | 469  | 486   | 491  | 424  |
| 125° | 620  | 625   | 647  | 662   | 666  | 556  |
| 135° | 804  | 808   | 817  | 830   | 831  | 619  |
| 145° | 972  | 975   | 978  | 983   | 984  | 607  |
| 155° | 1111 | 1111  | 1112 | 1116  | 1111 | 512  |
| 165° | 1208 | 1206  | 1207 | 1211  | 1205 | 341  |
| 175° | 1256 | 1252  | 1252 | 1258  | 1251 | 119  |
| 180° | 1259 | 1259  | 1259 | 1259  | 1259 |      |

TEST NUMBER: P1028196

CATALOG NUMBER: S125DIP-B850D1090UB27-4F0-XX-W2A-D1

**CANDELA DISTRIBUTION (FULL):**

|        | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|--------|--------|--------|--------|--------|--------|
| 0°     | 1055.9 | 1055.9 | 1055.9 | 1055.9 | 1055.9 |
| 2.5°   | 1059.0 | 1056.9 | 1049.7 | 1056.9 | 1055.9 |
| 5°     | 1055.9 | 1053.8 | 1046.6 | 1054.9 | 1053.8 |
| 7.5°   | 1048.7 | 1047.6 | 1040.4 | 1047.6 | 1046.6 |
| 10°    | 1038.3 | 1038.3 | 1030.0 | 1037.3 | 1036.2 |
| 12.5°  | 1023.8 | 1024.8 | 1018.6 | 1023.8 | 1020.7 |
| 15°    | 1008.3 | 1009.3 | 1002.1 | 1008.3 | 1004.1 |
| 17.5°  | 988.6  | 990.7  | 983.4  | 988.6  | 985.5  |
| 20°    | 966.9  | 968.9  | 961.7  | 964.8  | 964.8  |
| 22.5°  | 942.0  | 946.2  | 937.9  | 942.0  | 938.9  |
| 25°    | 916.2  | 919.3  | 913.0  | 917.2  | 912.0  |
| 27.5°  | 888.2  | 892.3  | 885.1  | 888.2  | 886.1  |
| 30°    | 856.1  | 862.3  | 856.1  | 858.2  | 857.1  |
| 32.5°  | 827.1  | 832.3  | 828.2  | 830.2  | 829.2  |
| 35°    | 793.0  | 800.2  | 797.1  | 800.2  | 800.2  |
| 37.5°  | 759.8  | 766.0  | 765.0  | 769.2  | 768.1  |
| 40°    | 725.7  | 734.0  | 732.9  | 737.1  | 739.1  |
| 42.5°  | 688.4  | 699.8  | 702.9  | 708.1  | 708.1  |
| 45°    | 653.2  | 664.6  | 669.8  | 677.0  | 678.1  |
| 47.5°  | 617.0  | 627.3  | 635.6  | 646.0  | 648.0  |
| 50°    | 579.7  | 591.1  | 602.5  | 613.9  | 617.0  |
| 52.5°  | 540.4  | 554.9  | 569.4  | 581.8  | 583.9  |
| 55°    | 502.1  | 518.6  | 535.2  | 546.6  | 550.7  |
| 57.5°  | 462.7  | 482.4  | 501.0  | 513.5  | 516.6  |
| 60°    | 423.4  | 444.1  | 464.8  | 480.3  | 483.4  |
| 62.5°  | 385.1  | 405.8  | 428.6  | 446.2  | 450.3  |
| 65°    | 345.8  | 369.6  | 394.4  | 409.9  | 414.1  |
| 67.5°  | 309.5  | 332.3  | 357.1  | 375.8  | 381.0  |
| 70°    | 269.2  | 293.0  | 319.9  | 339.5  | 345.8  |
| 72.5°  | 229.8  | 254.7  | 284.7  | 306.4  | 310.6  |
| 75°    | 190.5  | 217.4  | 250.5  | 271.2  | 276.4  |
| 77.5°  | 152.2  | 183.2  | 214.3  | 237.1  | 241.2  |
| 80°    | 117.0  | 148.0  | 183.2  | 206.0  | 210.1  |
| 82.5°  | 84.9   | 118.0  | 154.2  | 176.0  | 184.3  |
| 85°    | 56.9   | 91.1   | 127.3  | 150.1  | 158.4  |
| 87.5°  | 36.2   | 69.4   | 104.6  | 128.4  | 135.6  |
| 90°    | 17.6   | 58.5   | 100.6  | 129.3  | 139.4  |
| 92.5°  | 43.9   | 78.8   | 123.8  | 153.5  | 162.7  |
| 95°    | 77.2   | 106.0  | 151.0  | 180.6  | 189.9  |
| 97.5°  | 110.4  | 136.3  | 184.1  | 211.8  | 219.9  |
| 100°   | 148.6  | 170.3  | 216.2  | 246.7  | 254.9  |
| 102.5° | 189.7  | 214.2  | 251.2  | 281.7  | 290.8  |
| 105°   | 232.7  | 254.2  | 291.1  | 317.7  | 327.9  |
| 107.5° | 279.7  | 299.1  | 334.0  | 357.7  | 363.9  |
| 110°   | 328.6  | 346.0  | 377.9  | 400.5  | 406.8  |

TEST NUMBER: P1028196

CATALOG NUMBER: S125DIP-B850D1090UB27-4F0-XX-W2A-D1

**CANDELA DISTRIBUTION (continued):**

|        | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|--------|--------|--------|--------|--------|--------|
| 112.5° | 379.5  | 390.9  | 422.7  | 442.3  | 447.6  |
| 115°   | 428.5  | 439.7  | 468.6  | 486.2  | 491.4  |
| 117.5° | 478.5  | 484.6  | 512.4  | 531.0  | 534.4  |
| 120°   | 525.5  | 533.5  | 558.3  | 575.9  | 578.2  |
| 122.5° | 575.3  | 577.4  | 603.2  | 618.7  | 621.9  |
| 125°   | 620.4  | 625.3  | 647.0  | 661.6  | 665.7  |
| 127.5° | 669.4  | 671.3  | 689.9  | 704.4  | 708.7  |
| 130°   | 713.5  | 717.4  | 733.8  | 747.4  | 750.5  |
| 132.5° | 756.6  | 765.4  | 774.7  | 788.2  | 789.5  |
| 135°   | 803.6  | 808.4  | 816.7  | 830.1  | 831.4  |
| 137.5° | 847.7  | 852.5  | 858.6  | 872.0  | 871.2  |
| 140°   | 888.7  | 893.6  | 897.7  | 911.0  | 910.2  |
| 142.5° | 930.9  | 933.8  | 937.7  | 948.0  | 947.3  |
| 145°   | 972.0  | 974.9  | 977.9  | 983.1  | 984.2  |
| 147.5° | 1009.2 | 1012.2 | 1014.1 | 1019.2 | 1013.3 |
| 150°   | 1047.5 | 1046.5 | 1050.4 | 1050.4 | 1049.4 |
| 152.5° | 1078.8 | 1080.8 | 1081.7 | 1084.7 | 1080.8 |
| 155°   | 1111.1 | 1111.1 | 1112.1 | 1116.0 | 1111.1 |
| 157.5° | 1140.5 | 1138.6 | 1139.6 | 1143.5 | 1136.6 |
| 160°   | 1166.0 | 1163.1 | 1164.1 | 1168.0 | 1163.1 |
| 162.5° | 1188.5 | 1186.6 | 1186.6 | 1191.5 | 1185.6 |
| 165°   | 1208.1 | 1206.2 | 1207.2 | 1211.1 | 1205.2 |
| 167.5° | 1225.8 | 1221.9 | 1221.9 | 1227.7 | 1221.9 |
| 170°   | 1239.5 | 1235.6 | 1235.6 | 1241.5 | 1234.6 |
| 172.5° | 1249.3 | 1245.4 | 1245.4 | 1251.3 | 1245.4 |
| 175°   | 1256.2 | 1252.2 | 1252.2 | 1258.1 | 1251.3 |
| 177.5° | 1261.1 | 1257.1 | 1256.2 | 1262.0 | 1255.2 |
| 180°   | 1259.1 | 1259.1 | 1259.1 | 1259.1 | 1259.1 |

(END OF REPORT)