

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: P1026747

Luminaire Tested: S125DIP-B1090D850UB2750-4F0-XX-W2A-D\_4000K

Issue Date: 5/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1026747  
REPORT IS A COMBINATION OF REPORTS P1001476 AND P1007351  
Test Lab: INNOVATION CENTER  
Issue Date: 5/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S125DIP-B1090D850UB2750-4F0-XX-W2A-D\_4000K  
Description: Define 5 Direct/Indirect Pendant with 4000K BioUP LEDs {m-DER=0.865} {m-EER=0.951}  
Light Source: -  
Ballast/Driver: -

**Summary**

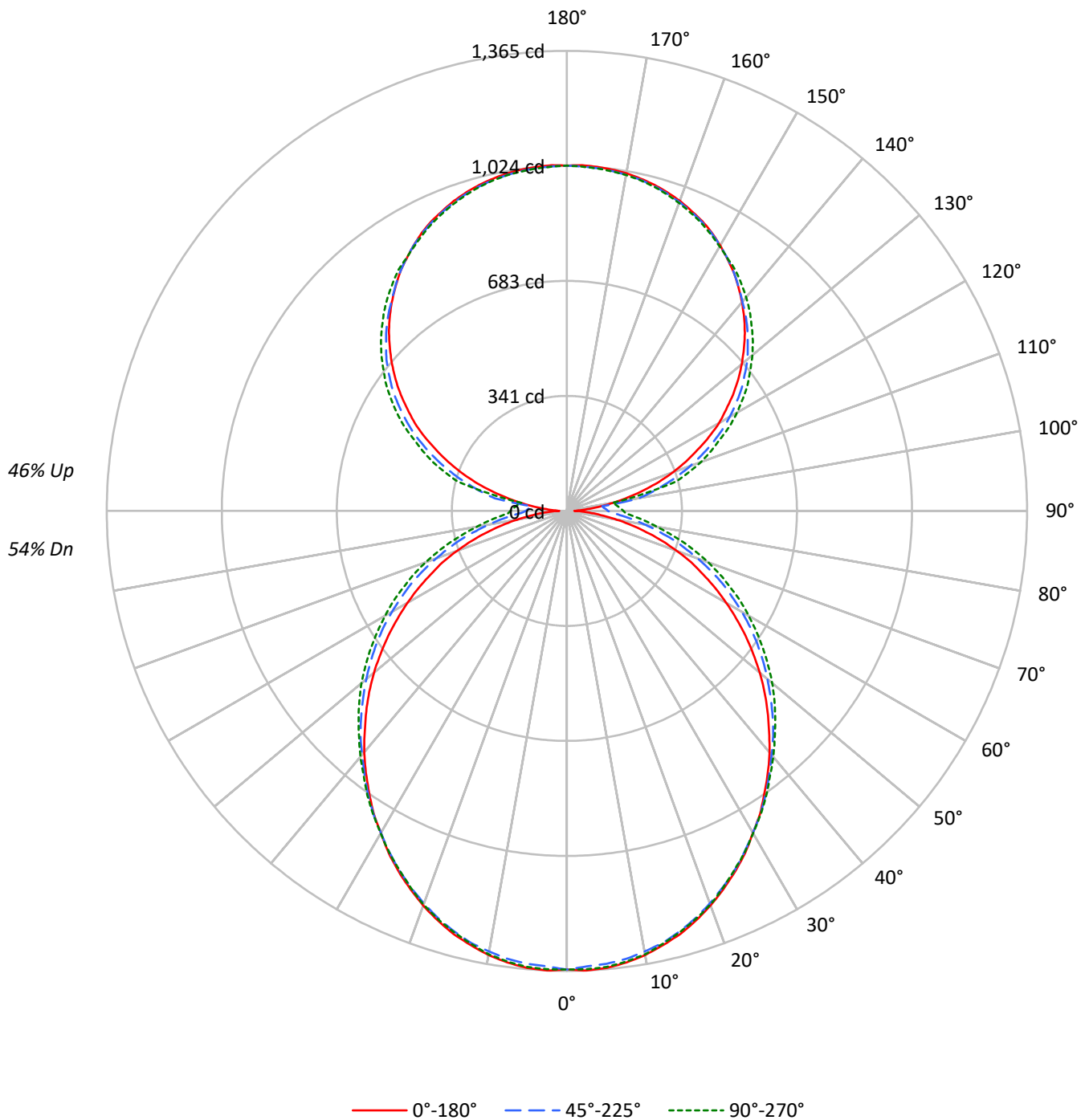
Lumens per Lamp: N/A  
Luminaire Lumens: 7365.0 lumens  
Efficiency: N/A  
Efficacy: 108.5 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.21 / 1.34  
Luminous Opening: Rectangular w/ Sides (W: 0.42' x L: 4' x H: 0.1')  
CIE Type: General Diffuse

Input Watts (W): 67.9  
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 | 30 | 10 |
| RCR |     |     |     |     |     |     |     |     |    |    |    |    |    |    |    |    |    |
| 0   | 108 | 108 | 108 | 108 | 100 | 100 | 100 | 100 | 85 | 85 | 85 | 72 | 72 | 72 | 60 | 60 | 60 |
| 1   | 98  | 93  | 89  | 85  | 90  | 86  | 83  | 79  | 74 | 71 | 69 | 62 | 60 | 58 | 51 | 50 | 49 |
| 2   | 89  | 81  | 74  | 69  | 82  | 75  | 69  | 65  | 64 | 60 | 56 | 54 | 51 | 48 | 45 | 42 | 40 |
| 3   | 81  | 71  | 63  | 57  | 74  | 66  | 59  | 54  | 56 | 51 | 47 | 48 | 44 | 40 | 39 | 37 | 34 |
| 4   | 74  | 63  | 54  | 48  | 68  | 58  | 51  | 45  | 50 | 44 | 40 | 42 | 38 | 34 | 35 | 32 | 29 |
| 5   | 68  | 56  | 47  | 41  | 62  | 52  | 44  | 39  | 45 | 39 | 34 | 38 | 33 | 30 | 32 | 28 | 25 |
| 6   | 62  | 50  | 41  | 35  | 57  | 46  | 39  | 34  | 40 | 34 | 30 | 34 | 29 | 26 | 29 | 25 | 22 |
| 7   | 58  | 45  | 37  | 31  | 53  | 42  | 35  | 29  | 36 | 30 | 26 | 31 | 26 | 23 | 26 | 22 | 20 |
| 8   | 53  | 41  | 33  | 27  | 49  | 38  | 31  | 26  | 33 | 27 | 23 | 28 | 24 | 20 | 24 | 20 | 18 |
| 9   | 50  | 37  | 30  | 24  | 46  | 35  | 28  | 23  | 30 | 25 | 21 | 26 | 22 | 18 | 22 | 18 | 16 |
| 10  | 46  | 34  | 27  | 22  | 43  | 32  | 25  | 21  | 28 | 22 | 19 | 24 | 20 | 16 | 20 | 17 | 14 |

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

|     | 0°   | 45°  | 90°  |
|-----|------|------|------|
| 0°  | 8720 | 8720 | 8720 |
| 5°  | 8734 | 8537 | 8558 |
| 10° | 8669 | 8363 | 8339 |
| 15° | 8563 | 8161 | 8070 |
| 20° | 8420 | 7915 | 7802 |
| 25° | 8251 | 7655 | 7480 |
| 30° | 8047 | 7371 | 7186 |
| 35° | 7857 | 7110 | 6914 |
| 40° | 7662 | 6834 | 6641 |
| 45° | 7442 | 6595 | 6396 |
| 50° | 7232 | 6335 | 6174 |
| 55° | 6979 | 6088 | 5917 |
| 60° | 6702 | 5806 | 5653 |
| 65° | 6412 | 5510 | 5356 |
| 70° | 6081 | 5111 | 5046 |
| 75° | 5559 | 4718 | 4669 |
| 80° | 4873 | 4241 | 4253 |
| 85° | 4197 | 3859 | 4032 |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 7442 cd/sqm

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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 128.8  | 1.7       |
| 10°-20°   | 365.6  | 5.0       |
| 20°-30°   | 543.6  | 7.4       |
| 30°-40°   | 643.8  | 8.7       |
| 40°-50°   | 665.6  | 9.0       |
| 50°-60°   | 613.2  | 8.3       |
| 60°-70°   | 495.7  | 6.7       |
| 70°-80°   | 331.7  | 4.5       |
| 80°-90°   | 173.0  | 2.3       |
| 90°-100°  | 131.4  | 1.8       |
| 100°-110° | 302.4  | 4.1       |
| 110°-120° | 464.1  | 6.3       |
| 120°-130° | 561.5  | 7.6       |
| 130°-140° | 586.7  | 8.0       |
| 140°-150° | 541.9  | 7.4       |
| 150°-160° | 436.5  | 5.9       |
| 160°-170° | 282.3  | 3.8       |
| 170°-180° | 97.3   | 1.3       |
| 0°-30°    | 1038.0 | 14.1      |
| 0°-40°    | 1681.9 | 22.8      |
| 0°-60°    | 2960.7 | 40.2      |
| 0°-90°    | 3961.0 | 53.8      |
| 90°-120°  | 897.9  | 12.2      |
| 90°-150°  | 2588.0 | 35.1      |
| 90°-180°  | 3404.0 | 46.2      |
| 0°-180°   | 7365.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|      | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|------|------|-------|------|-------|------|------|
| 0°   | 1361 | 1361  | 1361 | 1361  | 1361 |      |
| 5°   | 1361 | 1358  | 1349 | 1360  | 1358 | 129  |
| 15°  | 1300 | 1301  | 1292 | 1300  | 1294 | 366  |
| 25°  | 1181 | 1185  | 1177 | 1182  | 1176 | 544  |
| 35°  | 1022 | 1031  | 1027 | 1031  | 1031 | 640  |
| 45°  | 842  | 857   | 863  | 873   | 874  | 650  |
| 55°  | 647  | 668   | 690  | 704   | 710  | 578  |
| 65°  | 446  | 476   | 508  | 528   | 534  | 442  |
| 75°  | 246  | 280   | 323  | 350   | 356  | 260  |
| 85°  | 73   | 117   | 164  | 194   | 204  | 77   |
| 90°  | 22   | 71    | 122  | 156   | 168  | 17   |
| 95°  | 61   | 93    | 110  | 143   | 152  | 67   |
| 105° | 235  | 260   | 300  | 326   | 335  | 249  |
| 115° | 427  | 440   | 476  | 497   | 500  | 424  |
| 125° | 602  | 606   | 632  | 650   | 655  | 537  |
| 135° | 746  | 750   | 757  | 773   | 775  | 575  |
| 145° | 863  | 864   | 864  | 871   | 872  | 540  |
| 155° | 949  | 945   | 946  | 949   | 943  | 437  |
| 165° | 1002 | 997   | 998  | 1003  | 996  | 283  |
| 175° | 1025 | 1020  | 1021 | 1027  | 1020 | 98   |
| 180° | 1025 | 1025  | 1025 | 1025  | 1025 |      |

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**CANDELA DISTRIBUTION (FULL):**

|        | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|--------|--------|--------|--------|--------|--------|
| 0°     | 1361.0 | 1361.0 | 1361.0 | 1361.0 | 1361.0 |
| 2.5°   | 1365.0 | 1362.3 | 1352.9 | 1362.3 | 1361.0 |
| 5°     | 1361.0 | 1358.3 | 1348.9 | 1359.6 | 1358.3 |
| 7.5°   | 1351.6 | 1350.3 | 1340.9 | 1350.3 | 1348.9 |
| 10°    | 1338.3 | 1338.3 | 1327.6 | 1336.9 | 1335.6 |
| 12.5°  | 1319.6 | 1320.9 | 1312.9 | 1319.6 | 1315.6 |
| 15°    | 1299.6 | 1300.9 | 1291.6 | 1299.6 | 1294.2 |
| 17.5°  | 1274.2 | 1276.9 | 1267.6 | 1274.2 | 1270.2 |
| 20°    | 1246.2 | 1248.9 | 1239.5 | 1243.5 | 1243.5 |
| 22.5°  | 1214.2 | 1219.5 | 1208.8 | 1214.2 | 1210.2 |
| 25°    | 1180.8 | 1184.8 | 1176.8 | 1182.2 | 1175.5 |
| 27.5°  | 1144.8 | 1150.1 | 1140.8 | 1144.8 | 1142.1 |
| 30°    | 1103.4 | 1111.4 | 1103.4 | 1106.1 | 1104.8 |
| 32.5°  | 1066.1 | 1072.8 | 1067.4 | 1070.1 | 1068.7 |
| 35°    | 1022.1 | 1031.4 | 1027.4 | 1031.4 | 1031.4 |
| 37.5°  | 979.4  | 987.4  | 986.0  | 991.4  | 990.0  |
| 40°    | 935.3  | 946.0  | 944.7  | 950.0  | 952.7  |
| 42.5°  | 887.3  | 902.0  | 906.0  | 912.6  | 912.6  |
| 45°    | 841.9  | 856.6  | 863.3  | 872.6  | 873.9  |
| 47.5°  | 795.2  | 808.6  | 819.2  | 832.6  | 835.3  |
| 50°    | 747.2  | 761.9  | 776.5  | 791.2  | 795.2  |
| 52.5°  | 696.5  | 715.2  | 733.8  | 749.9  | 752.5  |
| 55°    | 647.1  | 668.5  | 689.8  | 704.5  | 709.8  |
| 57.5°  | 596.4  | 621.8  | 645.8  | 661.8  | 665.8  |
| 60°    | 545.7  | 572.4  | 599.1  | 619.1  | 623.1  |
| 62.5°  | 496.3  | 523.0  | 552.4  | 575.1  | 580.4  |
| 65°    | 445.6  | 476.3  | 508.4  | 528.4  | 533.7  |
| 67.5°  | 398.9  | 428.3  | 460.3  | 484.3  | 491.0  |
| 70°    | 346.9  | 377.6  | 412.3  | 437.6  | 445.6  |
| 72.5°  | 296.2  | 328.2  | 366.9  | 394.9  | 400.3  |
| 75°    | 245.5  | 280.2  | 322.9  | 349.6  | 356.2  |
| 77.5°  | 196.1  | 236.2  | 276.2  | 305.5  | 310.9  |
| 80°    | 150.8  | 190.8  | 236.2  | 265.5  | 270.9  |
| 82.5°  | 109.4  | 152.1  | 198.8  | 226.8  | 237.5  |
| 85°    | 73.4   | 117.4  | 164.1  | 193.5  | 204.1  |
| 87.5°  | 46.7   | 89.4   | 134.8  | 165.4  | 174.8  |
| 90°    | 22.1   | 70.8   | 121.6  | 156.1  | 167.6  |
| 92.5°  | 33.1   | 65.0   | 116.3  | 149.4  | 159.5  |
| 95°    | 60.6   | 93.0   | 109.6  | 142.8  | 152.1  |
| 97.5°  | 97.3   | 133.8  | 105.8  | 135.3  | 145.4  |
| 100°   | 141.5  | 171.8  | 217.6  | 132.4  | 137.4  |
| 102.5° | 186.5  | 214.9  | 257.8  | 286.0  | 230.2  |
| 105°   | 235.3  | 259.7  | 299.7  | 326.4  | 335.0  |
| 107.5° | 285.7  | 304.4  | 344.5  | 371.9  | 376.9  |
| 110°   | 334.4  | 350.5  | 389.3  | 412.4  | 422.5  |

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**CANDELA DISTRIBUTION (continued):**

|        | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|--------|--------|--------|--------|--------|--------|
| 112.5° | 381.5  | 395.8  | 432.6  | 453.6  | 461.4  |
| 115°   | 427.3  | 440.4  | 475.8  | 496.9  | 500.3  |
| 117.5° | 475.3  | 481.9  | 518.4  | 536.5  | 544.3  |
| 120°   | 520.9  | 524.2  | 557.1  | 578.2  | 582.5  |
| 122.5° | 559.8  | 565.0  | 595.0  | 614.9  | 618.4  |
| 125°   | 601.6  | 605.6  | 632.3  | 650.5  | 655.0  |
| 127.5° | 640.5  | 643.0  | 664.9  | 683.4  | 685.4  |
| 130°   | 677.0  | 679.5  | 698.8  | 715.2  | 718.1  |
| 132.5° | 712.1  | 716.7  | 727.7  | 746.4  | 747.9  |
| 135°   | 746.3  | 749.5  | 757.3  | 773.1  | 775.3  |
| 137.5° | 778.2  | 781.4  | 785.2  | 801.2  | 802.7  |
| 140°   | 807.9  | 809.5  | 810.1  | 826.2  | 827.1  |
| 142.5° | 836.1  | 835.5  | 837.0  | 849.0  | 849.8  |
| 145°   | 863.4  | 863.6  | 863.6  | 871.1  | 871.8  |
| 147.5° | 886.4  | 886.4  | 887.2  | 890.6  | 887.9  |
| 150°   | 909.2  | 907.7  | 909.2  | 910.7  | 905.9  |
| 152.5° | 931.2  | 927.4  | 928.9  | 930.5  | 925.1  |
| 155°   | 949.4  | 944.9  | 946.4  | 948.7  | 942.6  |
| 157.5° | 963.9  | 961.6  | 961.6  | 963.9  | 957.8  |
| 160°   | 979.1  | 974.5  | 975.3  | 978.3  | 972.2  |
| 162.5° | 991.2  | 986.7  | 987.4  | 992.0  | 985.1  |
| 165°   | 1001.9 | 997.3  | 998.1  | 1002.6 | 996.5  |
| 167.5° | 1010.2 | 1005.7 | 1006.4 | 1011.7 | 1004.9 |
| 170°   | 1017.0 | 1011.7 | 1012.5 | 1018.6 | 1011.7 |
| 172.5° | 1021.6 | 1016.3 | 1017.8 | 1023.1 | 1016.3 |
| 175°   | 1024.6 | 1020.1 | 1020.8 | 1026.9 | 1020.1 |
| 177.5° | 1026.9 | 1022.4 | 1023.1 | 1028.4 | 1022.4 |
| 180°   | 1024.6 | 1024.6 | 1024.6 | 1024.6 | 1024.6 |

(END OF REPORT)