

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: P1027525

Luminaire Tested: S125DIP-B1090D850UB50-4F0-XX-W2A-F4

Issue Date: 5/6/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1027525  
REPORT IS A COMBINATION OF REPORTS P1001518 AND P1007351  
Test Lab: INNOVATION CENTER  
Issue Date: 5/6/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S125DIP-B1090D850UB50-4F0-XX-W2A-F4  
Description: Define 5 Direct/Indirect Pendant with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}  
Light Source: -  
Ballast/Driver: -

**Summary**

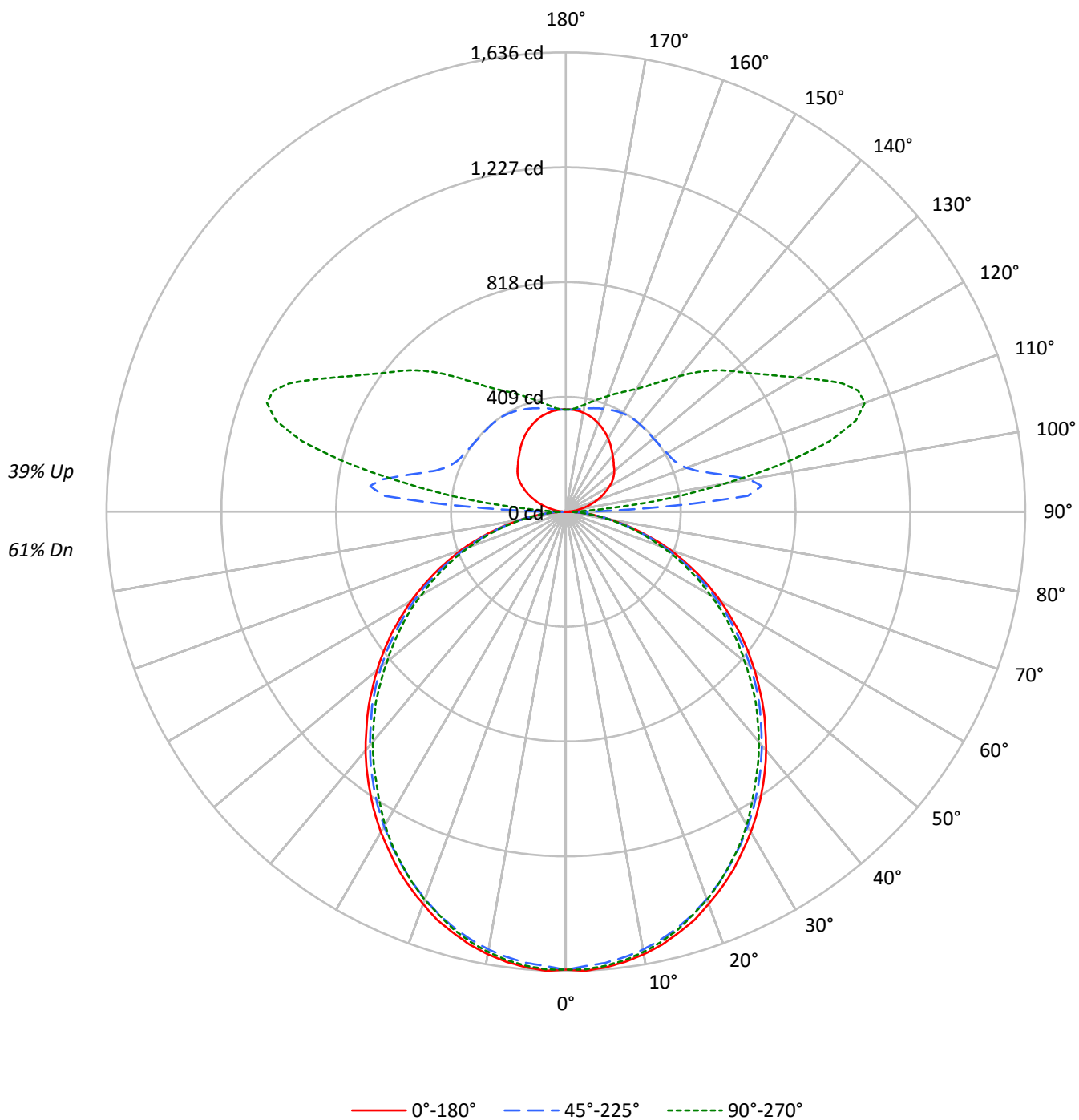
Lumens per Lamp: N/A  
Luminaire Lumens: 6987.6 lumens  
Efficiency: N/A  
Efficacy: 102.9 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.18 / 1.3  
Luminous Opening: Rectangular w/ Sides (W: 0.42' x L: 4' x H: 0.1')  
CIE Type: Semi-Direct

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   | 110 | 110 | 110 | 110 | 103 | 103 | 103 | 103 | 89 | 89 | 89 | 77 | 77 | 77 | 66 | 66 | 66 |
| 1   | 100 | 96  | 92  | 88  | 93  | 90  | 86  | 83  | 78 | 76 | 73 | 68 | 66 | 64 | 58 | 57 | 56 |
| 2   | 91  | 84  | 77  | 72  | 85  | 78  | 73  | 68  | 69 | 64 | 61 | 60 | 56 | 54 | 51 | 49 | 47 |
| 3   | 83  | 73  | 66  | 60  | 77  | 69  | 62  | 57  | 60 | 55 | 51 | 53 | 49 | 45 | 45 | 42 | 40 |
| 4   | 76  | 65  | 57  | 51  | 71  | 61  | 54  | 48  | 54 | 48 | 43 | 47 | 42 | 39 | 41 | 37 | 34 |
| 5   | 70  | 58  | 50  | 44  | 65  | 55  | 47  | 42  | 48 | 42 | 38 | 42 | 37 | 34 | 37 | 33 | 30 |
| 6   | 64  | 52  | 44  | 38  | 60  | 49  | 42  | 36  | 43 | 37 | 33 | 38 | 33 | 30 | 33 | 29 | 26 |
| 7   | 60  | 47  | 39  | 33  | 56  | 44  | 37  | 32  | 39 | 33 | 29 | 35 | 30 | 26 | 30 | 26 | 23 |
| 8   | 55  | 43  | 35  | 29  | 52  | 40  | 33  | 28  | 36 | 30 | 26 | 32 | 27 | 23 | 28 | 24 | 21 |
| 9   | 52  | 39  | 31  | 26  | 48  | 37  | 30  | 25  | 33 | 27 | 23 | 29 | 24 | 21 | 26 | 22 | 19 |
| 10  | 48  | 36  | 29  | 24  | 45  | 34  | 27  | 23  | 30 | 25 | 21 | 27 | 22 | 19 | 24 | 20 | 17 |

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

|     | 0°    | 45°   | 90°   |
|-----|-------|-------|-------|
| 0°  | 10450 | 10450 | 10450 |
| 5°  | 10450 | 10207 | 10227 |
| 10° | 10364 | 9973  | 9942  |
| 15° | 10228 | 9693  | 9606  |
| 20° | 10043 | 9369  | 9222  |
| 25° | 9846  | 9015  | 8810  |
| 30° | 9608  | 8646  | 8375  |
| 35° | 9354  | 8259  | 7889  |
| 40° | 9091  | 7851  | 7457  |
| 45° | 8806  | 7453  | 6997  |
| 50° | 8493  | 7001  | 6462  |
| 55° | 8183  | 6503  | 5969  |
| 60° | 7813  | 5978  | 5396  |
| 65° | 7372  | 5370  | 4804  |
| 70° | 6920  | 4671  | 4121  |
| 75° | 6166  | 3846  | 3332  |
| 80° | 5254  | 2873  | 2451  |
| 85° | 4059  | 1700  | 1351  |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 8806 cd/sqm

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CATALOG NUMBER: S125DIP-B1090D850UB50-4F0-XX-W2A-F4

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 153.9  | 2.2       |
| 10°-20°   | 434.7  | 6.2       |
| 20°-30°   | 641.8  | 9.2       |
| 30°-40°   | 748.8  | 10.7      |
| 40°-50°   | 752.0  | 10.8      |
| 50°-60°   | 660.2  | 9.4       |
| 60°-70°   | 491.7  | 7.0       |
| 70°-80°   | 280.8  | 4.0       |
| 80°-90°   | 82.5   | 1.2       |
| 90°-100°  | 274.3  | 3.9       |
| 100°-110° | 569.7  | 8.2       |
| 110°-120° | 532.1  | 7.6       |
| 120°-130° | 430.6  | 6.2       |
| 130°-140° | 345.9  | 5.0       |
| 140°-150° | 261.1  | 3.7       |
| 150°-160° | 183.9  | 2.6       |
| 160°-170° | 108.4  | 1.6       |
| 170°-180° | 35.2   | 0.5       |
| 0°-30°    | 1230.4 | 17.6      |
| 0°-40°    | 1979.2 | 28.3      |
| 0°-60°    | 3391.4 | 48.5      |
| 0°-90°    | 4246.5 | 60.8      |
| 90°-120°  | 1376.1 | 19.7      |
| 90°-150°  | 2413.7 | 34.5      |
| 90°-180°  | 2741.0 | 39.2      |
| 0°-180°   | 6987.6 | 100.0     |

**CANDELA DISTRIBUTION:**

|      | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|------|------|-------|------|-------|------|------|
| 0°   | 1631 | 1631  | 1631 | 1631  | 1631 |      |
| 5°   | 1628 | 1626  | 1613 | 1624  | 1623 | 155  |
| 15°  | 1552 | 1548  | 1534 | 1541  | 1541 | 438  |
| 25°  | 1409 | 1403  | 1386 | 1388  | 1384 | 648  |
| 35°  | 1217 | 1212  | 1194 | 1187  | 1177 | 761  |
| 45°  | 996  | 991   | 976  | 960   | 956  | 767  |
| 55°  | 759  | 755   | 737  | 725   | 716  | 677  |
| 65°  | 512  | 510   | 496  | 484   | 479  | 508  |
| 75°  | 272  | 270   | 263  | 259   | 254  | 290  |
| 85°  | 71   | 72    | 72   | 71    | 68   | 78   |
| 90°  | 1    | 7     | 12   | 15    | 17   | 6    |
| 95°  | 24   | 72    | 651  | 295   | 173  | 25   |
| 105° | 83   | 116   | 532  | 1048  | 973  | 87   |
| 115° | 148  | 179   | 427  | 921   | 1084 | 146  |
| 125° | 206  | 241   | 410  | 733   | 854  | 183  |
| 135° | 241  | 290   | 407  | 614   | 709  | 187  |
| 145° | 280  | 321   | 408  | 508   | 560  | 176  |
| 155° | 320  | 344   | 398  | 450   | 469  | 147  |
| 165° | 350  | 359   | 382  | 405   | 411  | 98   |
| 175° | 364  | 364   | 366  | 371   | 369  | 35   |
| 180° | 364  | 364   | 364  | 364   | 364  |      |

TEST NUMBER: P1027525

CATALOG NUMBER: S125DIP-B1090D850UB50-4F0-XX-W2A-F4

**CANDELA DISTRIBUTION (FULL):**

|        | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|--------|--------|--------|--------|--------|--------|
| 0°     | 1631.0 | 1631.0 | 1631.0 | 1631.0 | 1631.0 |
| 2.5°   | 1636.1 | 1632.3 | 1619.4 | 1632.3 | 1631.0 |
| 5°     | 1628.4 | 1625.8 | 1612.9 | 1624.5 | 1623.2 |
| 7.5°   | 1616.8 | 1614.2 | 1600.0 | 1611.6 | 1610.3 |
| 10°    | 1600.0 | 1597.4 | 1583.2 | 1593.5 | 1592.3 |
| 12.5°  | 1579.4 | 1574.2 | 1561.3 | 1569.0 | 1569.0 |
| 15°    | 1552.3 | 1548.4 | 1534.2 | 1540.6 | 1540.6 |
| 17.5°  | 1523.9 | 1517.4 | 1503.2 | 1511.0 | 1504.5 |
| 20°    | 1486.4 | 1483.9 | 1467.1 | 1476.1 | 1469.7 |
| 22.5°  | 1449.0 | 1443.9 | 1428.4 | 1433.5 | 1429.7 |
| 25°    | 1409.0 | 1402.6 | 1385.8 | 1388.4 | 1384.5 |
| 27.5°  | 1362.6 | 1358.7 | 1341.9 | 1343.2 | 1339.4 |
| 30°    | 1317.4 | 1313.5 | 1294.2 | 1291.6 | 1287.7 |
| 32.5°  | 1268.4 | 1261.9 | 1245.2 | 1240.0 | 1232.3 |
| 35°    | 1216.8 | 1211.6 | 1193.5 | 1187.1 | 1176.8 |
| 37.5°  | 1163.9 | 1157.4 | 1140.6 | 1131.6 | 1125.2 |
| 40°    | 1109.7 | 1103.2 | 1085.2 | 1073.5 | 1069.7 |
| 42.5°  | 1051.6 | 1046.4 | 1028.4 | 1018.1 | 1011.6 |
| 45°    | 996.1  | 991.0  | 975.5  | 960.0  | 956.1  |
| 47.5°  | 935.5  | 936.8  | 917.4  | 901.9  | 892.9  |
| 50°    | 877.4  | 873.5  | 858.1  | 841.3  | 832.3  |
| 52.5°  | 818.1  | 815.5  | 798.7  | 784.5  | 774.2  |
| 55°    | 758.7  | 754.8  | 736.8  | 725.2  | 716.1  |
| 57.5°  | 695.5  | 694.2  | 678.7  | 663.2  | 659.4  |
| 60°    | 636.1  | 631.0  | 616.8  | 603.9  | 594.8  |
| 62.5°  | 574.2  | 570.3  | 558.7  | 544.5  | 538.1  |
| 65°    | 512.3  | 509.7  | 495.5  | 483.9  | 478.7  |
| 67.5°  | 451.6  | 446.5  | 436.1  | 425.8  | 423.2  |
| 70°    | 394.8  | 388.4  | 376.8  | 369.0  | 363.9  |
| 72.5°  | 332.9  | 329.0  | 322.6  | 313.5  | 308.4  |
| 75°    | 272.3  | 269.7  | 263.2  | 259.4  | 254.2  |
| 77.5°  | 215.5  | 214.2  | 210.3  | 207.7  | 203.9  |
| 80°    | 162.6  | 162.6  | 160.0  | 158.7  | 156.1  |
| 82.5°  | 116.1  | 113.5  | 113.5  | 111.0  | 111.0  |
| 85°    | 71.0   | 72.3   | 72.3   | 71.0   | 68.4   |
| 87.5°  | 34.8   | 34.8   | 33.5   | 33.5   | 31.0   |
| 90°    | 0.7    | 6.6    | 11.7   | 15.4   | 16.9   |
| 92.5°  | 11.0   | 60.2   | 293.0  | 78.2   | 54.3   |
| 95°    | 24.2   | 71.6   | 650.6  | 295.2  | 172.6  |
| 97.5°  | 37.4   | 77.5   | 702.7  | 533.1  | 378.2  |
| 100°   | 51.4   | 88.8   | 663.1  | 753.4  | 572.7  |
| 102.5° | 66.8   | 101.7  | 593.3  | 939.9  | 790.1  |
| 105°   | 83.0   | 116.0  | 532.4  | 1048.2 | 972.9  |
| 107.5° | 98.4   | 131.0  | 486.8  | 1078.6 | 1083.1 |
| 110°   | 115.3  | 146.9  | 456.7  | 1049.7 | 1133.0 |

TEST NUMBER: P1027525

CATALOG NUMBER: S125DIP-B1090D850UB50-4F0-XX-W2A-F4

**CANDELA DISTRIBUTION (continued):**

|        | 0°    | 22.5° | 45°   | 67.5° | 90°    |
|--------|-------|-------|-------|-------|--------|
| 112.5° | 132.2 | 162.6 | 439.1 | 989.1 | 1127.1 |
| 115°   | 148.3 | 178.8 | 427.4 | 921.2 | 1083.8 |
| 117.5° | 163.0 | 195.3 | 420.7 | 859.5 | 1018.5 |
| 120°   | 177.7 | 211.1 | 416.3 | 807.7 | 955.3  |
| 122.5° | 193.1 | 226.5 | 412.7 | 766.2 | 899.5  |
| 125°   | 205.6 | 240.8 | 409.7 | 732.8 | 854.0  |
| 127.5° | 215.9 | 254.8 | 408.3 | 704.2 | 812.1  |
| 130°   | 225.4 | 268.0 | 406.8 | 675.2 | 779.1  |
| 132.5° | 232.8 | 279.8 | 406.8 | 644.0 | 746.0  |
| 135°   | 240.8 | 289.7 | 406.8 | 614.2 | 709.3  |
| 137.5° | 251.1 | 298.8 | 407.5 | 583.0 | 671.1  |
| 140°   | 259.9 | 306.6 | 408.3 | 554.4 | 630.8  |
| 142.5° | 270.2 | 313.9 | 409.0 | 529.8 | 593.3  |
| 145°   | 280.5 | 321.2 | 408.3 | 508.5 | 559.5  |
| 147.5° | 291.5 | 327.8 | 406.8 | 490.1 | 529.4  |
| 150°   | 301.1 | 333.8 | 404.6 | 475.1 | 505.2  |
| 152.5° | 311.3 | 339.6 | 401.7 | 462.2 | 486.1  |
| 155°   | 320.1 | 344.4 | 398.0 | 449.8 | 469.2  |
| 157.5° | 328.2 | 349.2 | 394.3 | 438.0 | 453.8  |
| 160°   | 336.3 | 352.8 | 390.6 | 426.2 | 438.4  |
| 162.5° | 342.9 | 356.5 | 386.2 | 415.6 | 424.4  |
| 165°   | 349.5 | 359.1 | 381.8 | 405.0 | 411.2  |
| 167.5° | 353.9 | 360.6 | 377.4 | 395.0 | 398.7  |
| 170°   | 358.3 | 362.4 | 373.8 | 385.5 | 387.7  |
| 172.5° | 361.3 | 363.1 | 369.3 | 377.8 | 377.4  |
| 175°   | 363.5 | 363.5 | 366.4 | 370.8 | 369.3  |
| 177.5° | 364.9 | 363.5 | 364.2 | 366.4 | 364.2  |
| 180°   | 364.2 | 364.2 | 364.2 | 364.2 | 364.2  |

(END OF REPORT)