

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: P1027292

Luminaire Tested: S125RDIP-B850D610UB2750-4F0-XX-W2A-F\_4000K

Issue Date: 5/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1027292  
REPORT IS A COMBINATION OF REPORTS P1005853 AND P1007351  
Test Lab: INNOVATION CENTER  
Issue Date: 5/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S125RDIP-B850D610UB2750-4F0-XX-W2A-F\_4000K  
Description: Define 5 Regressed Direct/Indirect Pendant with 4000K BioUP LEDs {m-DER=0.865}  
{m-EER=0.951}  
Light Source: -  
Ballast/Driver: -

**Summary**

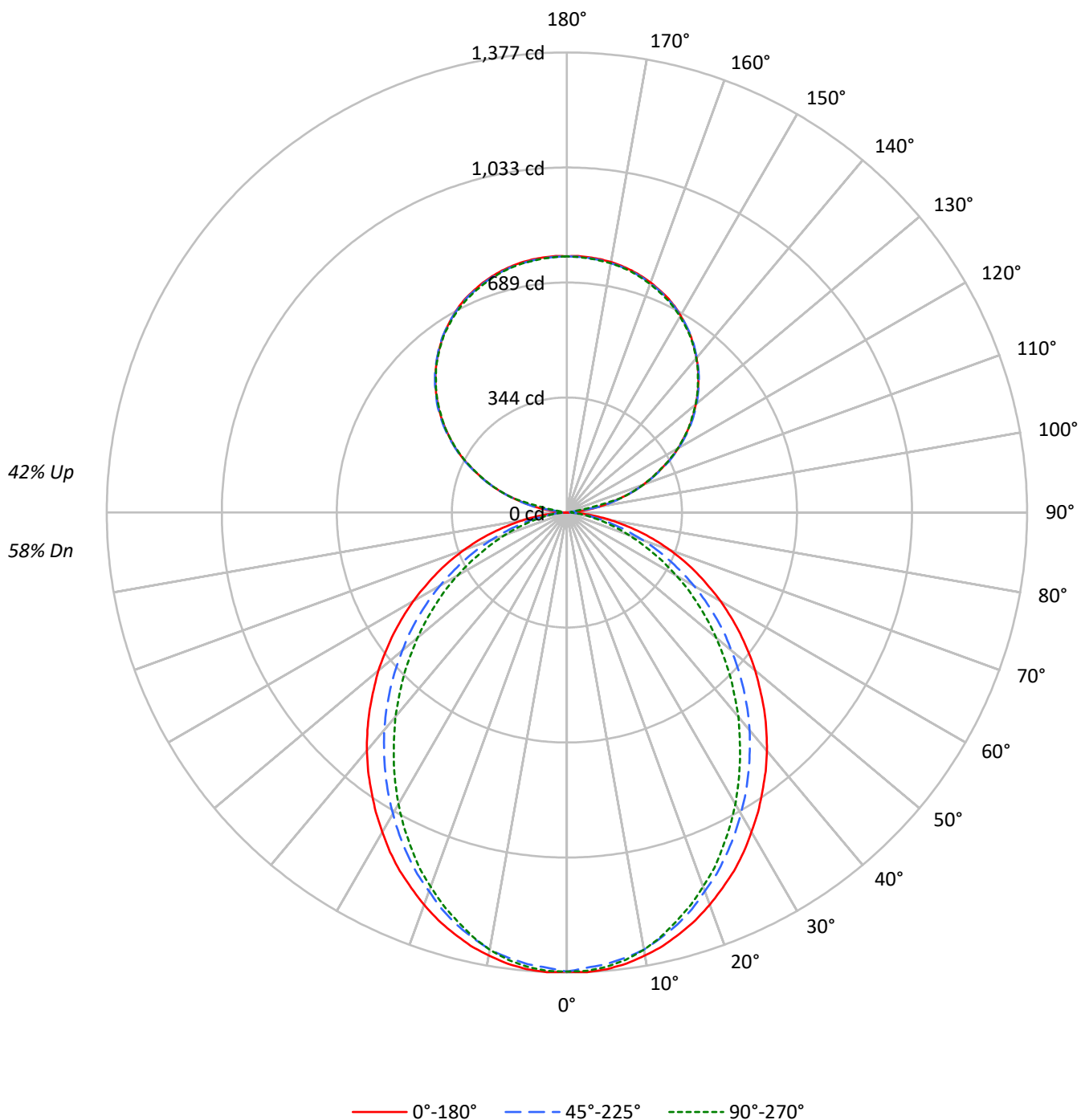
Lumens per Lamp: N/A  
Luminaire Lumens: 5604.0 lumens  
Efficiency: N/A  
Efficacy: 109.2 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.11 / 1.25  
Luminous Opening: Rectangular w/ Sides (W: 0.42' x L: 4' x H: 0.1')  
CIE Type: General Diffuse

Input Watts (W): 51.3  
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   | 109 | 109 | 109 | 109 | 102 | 102 | 102 | 102 | 88 | 88 | 88 | 75 | 75 | 75 | 63 | 63 | 63 |
| 1   | 100 | 96  | 92  | 88  | 93  | 89  | 86  | 83  | 77 | 75 | 73 | 67 | 65 | 63 | 57 | 55 | 54 |
| 2   | 91  | 84  | 78  | 73  | 85  | 78  | 73  | 68  | 68 | 64 | 61 | 59 | 56 | 53 | 50 | 48 | 46 |
| 3   | 83  | 74  | 67  | 61  | 77  | 69  | 63  | 57  | 60 | 55 | 51 | 52 | 48 | 45 | 45 | 42 | 39 |
| 4   | 76  | 66  | 58  | 52  | 71  | 61  | 54  | 49  | 54 | 48 | 44 | 47 | 42 | 39 | 40 | 37 | 34 |
| 5   | 70  | 59  | 50  | 44  | 65  | 55  | 48  | 42  | 48 | 42 | 38 | 42 | 37 | 34 | 36 | 33 | 30 |
| 6   | 65  | 53  | 45  | 39  | 60  | 49  | 42  | 37  | 44 | 38 | 33 | 38 | 33 | 30 | 33 | 29 | 26 |
| 7   | 60  | 48  | 40  | 34  | 56  | 45  | 38  | 33  | 40 | 34 | 29 | 35 | 30 | 26 | 30 | 26 | 24 |
| 8   | 56  | 43  | 36  | 30  | 52  | 41  | 34  | 29  | 36 | 30 | 26 | 32 | 27 | 24 | 28 | 24 | 21 |
| 9   | 52  | 40  | 32  | 27  | 48  | 37  | 31  | 26  | 33 | 28 | 24 | 29 | 25 | 21 | 26 | 22 | 19 |
| 10  | 49  | 36  | 29  | 24  | 45  | 34  | 28  | 23  | 31 | 25 | 21 | 27 | 23 | 19 | 24 | 20 | 17 |

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

|     | 0°   | 45°  | 90°  |
|-----|------|------|------|
| 0°  | 8805 | 8805 | 8805 |
| 5°  | 8806 | 8586 | 8600 |
| 10° | 8720 | 8369 | 8296 |
| 15° | 8597 | 8066 | 7896 |
| 20° | 8444 | 7703 | 7477 |
| 25° | 8269 | 7346 | 7027 |
| 30° | 8054 | 6955 | 6556 |
| 35° | 7835 | 6558 | 6054 |
| 40° | 7628 | 6150 | 5564 |
| 45° | 7377 | 5710 | 5052 |
| 50° | 7123 | 5242 | 4530 |
| 55° | 6829 | 4782 | 3989 |
| 60° | 6528 | 4255 | 3428 |
| 65° | 6169 | 3667 | 2823 |
| 70° | 5750 | 2985 | 2222 |
| 75° | 5172 | 2244 | 1619 |
| 80° | 4359 | 1454 | 1091 |
| 85° | 3265 | 781  | 614  |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
Vertical Angle: 45°  
Luminance: 7377 cd/sqm

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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 129.3  | 2.3       |
| 10°-20°   | 361.5  | 6.5       |
| 20°-30°   | 524.1  | 9.4       |
| 30°-40°   | 597.1  | 10.7      |
| 40°-50°   | 582.0  | 10.4      |
| 50°-60°   | 489.8  | 8.7       |
| 60°-70°   | 343.3  | 6.1       |
| 70°-80°   | 176.0  | 3.1       |
| 80°-90°   | 45.0   | 0.8       |
| 90°-100°  | 26.0   | 0.5       |
| 100°-110° | 173.1  | 3.1       |
| 110°-120° | 311.7  | 5.6       |
| 120°-130° | 400.1  | 7.1       |
| 130°-140° | 430.3  | 7.7       |
| 140°-150° | 403.9  | 7.2       |
| 150°-160° | 326.7  | 5.8       |
| 160°-170° | 211.3  | 3.8       |
| 170°-180° | 72.9   | 1.3       |
| 0°-30°    | 1014.9 | 18.1      |
| 0°-40°    | 1612.1 | 28.8      |
| 0°-60°    | 2683.9 | 47.9      |
| 0°-90°    | 3248.1 | 58.0      |
| 90°-120°  | 510.8  | 9.1       |
| 90°-150°  | 1745.0 | 31.1      |
| 90°-180°  | 2356.0 | 42.0      |
| 0°-180°   | 5604.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|      | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|------|------|-------|------|-------|------|------|
| 0°   | 1374 | 1374  | 1374 | 1374  | 1374 |      |
| 5°   | 1372 | 1368  | 1357 | 1367  | 1365 | 130  |
| 15°  | 1305 | 1298  | 1277 | 1276  | 1266 | 368  |
| 25°  | 1183 | 1168  | 1129 | 1116  | 1104 | 545  |
| 35°  | 1019 | 994   | 948  | 918   | 903  | 638  |
| 45°  | 834  | 804   | 747  | 706   | 690  | 644  |
| 55°  | 633  | 600   | 542  | 495   | 478  | 566  |
| 65°  | 429  | 393   | 338  | 297   | 281  | 425  |
| 75°  | 228  | 197   | 154  | 131   | 124  | 241  |
| 85°  | 57   | 38    | 33   | 32    | 31   | 63   |
| 90°  | 1    | 5     | 9    | 12    | 14   | 5    |
| 95°  | 32   | 31    | 9    | 12    | 12   | 40   |
| 105° | 167  | 169   | 169  | 169   | 169  | 177  |
| 115° | 314  | 317   | 317  | 315   | 312  | 311  |
| 125° | 446  | 450   | 450  | 448   | 446  | 399  |
| 135° | 557  | 560   | 559  | 558   | 554  | 429  |
| 145° | 645  | 646   | 646  | 647   | 644  | 404  |
| 155° | 711  | 707   | 708  | 710   | 706  | 327  |
| 165° | 750  | 746   | 747  | 750   | 746  | 212  |
| 175° | 767  | 764   | 764  | 769   | 764  | 73   |
| 180° | 767  | 767   | 767  | 767   | 767  |      |

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**CANDELA DISTRIBUTION (FULL):**

|        | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|--------|--------|--------|--------|--------|--------|
| 0°     | 1374.3 | 1374.3 | 1374.3 | 1374.3 | 1374.3 |
| 2.5°   | 1377.4 | 1374.3 | 1363.9 | 1374.3 | 1373.3 |
| 5°     | 1372.2 | 1368.1 | 1356.7 | 1367.0 | 1365.0 |
| 7.5°   | 1361.9 | 1357.7 | 1344.2 | 1352.5 | 1350.4 |
| 10°    | 1346.3 | 1343.2 | 1328.6 | 1331.7 | 1328.6 |
| 12.5°  | 1328.6 | 1324.5 | 1303.7 | 1305.8 | 1300.6 |
| 15°    | 1304.8 | 1298.5 | 1276.7 | 1275.7 | 1266.4 |
| 17.5°  | 1279.8 | 1270.5 | 1244.6 | 1239.4 | 1232.1 |
| 20°    | 1249.7 | 1239.4 | 1206.2 | 1201.0 | 1191.6 |
| 22.5°  | 1216.5 | 1206.2 | 1170.9 | 1159.4 | 1152.2 |
| 25°    | 1183.3 | 1167.7 | 1129.3 | 1115.8 | 1104.4 |
| 27.5°  | 1145.9 | 1127.3 | 1086.8 | 1069.1 | 1057.7 |
| 30°    | 1104.4 | 1084.7 | 1041.1 | 1017.2 | 1007.9 |
| 32.5°  | 1063.9 | 1040.1 | 995.4  | 968.5  | 956.0  |
| 35°    | 1019.3 | 994.4  | 947.7  | 917.6  | 903.1  |
| 37.5°  | 976.8  | 946.7  | 898.9  | 863.6  | 849.1  |
| 40°    | 931.1  | 899.9  | 850.1  | 810.7  | 798.2  |
| 42.5°  | 883.3  | 851.2  | 799.3  | 761.9  | 742.2  |
| 45°    | 834.5  | 804.4  | 747.4  | 705.8  | 690.3  |
| 47.5°  | 783.7  | 752.5  | 695.5  | 652.9  | 635.3  |
| 50°    | 735.9  | 701.7  | 642.5  | 598.9  | 583.4  |
| 52.5°  | 684.0  | 648.7  | 593.7  | 546.0  | 530.4  |
| 55°    | 633.2  | 600.0  | 541.8  | 495.1  | 478.5  |
| 57.5°  | 581.3  | 546.0  | 489.9  | 444.3  | 429.7  |
| 60°    | 531.5  | 495.1  | 439.1  | 393.4  | 377.8  |
| 62.5°  | 478.5  | 444.3  | 387.2  | 345.7  | 330.1  |
| 65°    | 428.7  | 393.4  | 338.4  | 296.9  | 281.3  |
| 67.5°  | 378.9  | 343.6  | 290.6  | 251.2  | 238.7  |
| 70°    | 328.0  | 292.7  | 240.8  | 208.6  | 196.2  |
| 72.5°  | 278.2  | 243.9  | 196.2  | 167.1  | 159.9  |
| 75°    | 228.4  | 197.2  | 153.6  | 130.8  | 123.5  |
| 77.5°  | 177.5  | 152.6  | 116.3  | 98.6   | 92.4   |
| 80°    | 134.9  | 110.0  | 81.0   | 71.6   | 69.5   |
| 82.5°  | 93.4   | 71.6   | 54.0   | 50.9   | 49.8   |
| 85°    | 57.1   | 38.4   | 33.2   | 32.2   | 31.1   |
| 87.5°  | 23.9   | 16.6   | 15.6   | 15.6   | 14.5   |
| 90°    | 0.6    | 5.1    | 9.1    | 11.9   | 13.6   |
| 92.5°  | 10.8   | 5.7    | 9.1    | 11.9   | 12.5   |
| 95°    | 32.4   | 30.7   | 9.1    | 11.9   | 11.9   |
| 97.5°  | 60.8   | 64.2   | 10.2   | 11.4   | 11.9   |
| 100°   | 94.9   | 96.6   | 98.9   | 14.2   | 11.9   |
| 102.5° | 129.6  | 131.9  | 133.0  | 134.2  | 86.4   |
| 105°   | 167.1  | 169.4  | 169.4  | 169.4  | 168.9  |
| 107.5° | 205.8  | 205.8  | 206.9  | 207.5  | 205.2  |
| 110°   | 243.3  | 243.3  | 244.5  | 242.8  | 243.3  |



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**CANDELA DISTRIBUTION (continued):**

|        | 0°    | 22.5° | 45°   | 67.5° | 90°   |
|--------|-------|-------|-------|-------|-------|
| 112.5° | 278.6 | 280.3 | 280.8 | 278.6 | 277.4 |
| 115°   | 313.8 | 316.7 | 317.2 | 315.0 | 311.5 |
| 117.5° | 350.8 | 350.8 | 353.1 | 349.6 | 348.5 |
| 120°   | 384.9 | 384.3 | 386.0 | 384.9 | 382.0 |
| 122.5° | 415.0 | 417.9 | 418.4 | 417.3 | 413.9 |
| 125°   | 446.3 | 450.3 | 450.3 | 448.0 | 446.3 |
| 127.5° | 476.4 | 479.3 | 478.7 | 477.6 | 473.0 |
| 130°   | 503.7 | 506.6 | 507.1 | 505.4 | 502.6 |
| 132.5° | 531.0 | 534.4 | 532.7 | 532.7 | 529.9 |
| 135°   | 556.6 | 560.0 | 558.9 | 557.7 | 554.3 |
| 137.5° | 580.5 | 583.9 | 582.7 | 582.7 | 579.9 |
| 140°   | 603.8 | 604.9 | 604.3 | 605.5 | 602.1 |
| 142.5° | 624.8 | 625.4 | 626.5 | 626.5 | 623.1 |
| 145°   | 645.3 | 646.4 | 646.4 | 647.0 | 643.6 |
| 147.5° | 663.5 | 663.5 | 664.0 | 664.6 | 660.6 |
| 150°   | 680.5 | 679.4 | 680.5 | 681.7 | 677.1 |
| 152.5° | 697.0 | 694.2 | 695.3 | 696.4 | 692.5 |
| 155°   | 710.7 | 707.2 | 708.4 | 710.1 | 705.5 |
| 157.5° | 721.5 | 719.7 | 719.7 | 721.5 | 716.9 |
| 160°   | 732.8 | 729.4 | 730.0 | 732.3 | 727.7 |
| 162.5° | 741.9 | 738.5 | 739.1 | 742.5 | 737.4 |
| 165°   | 749.9 | 746.5 | 747.0 | 750.4 | 745.9 |
| 167.5° | 756.1 | 752.7 | 753.3 | 757.3 | 752.2 |
| 170°   | 761.2 | 757.3 | 757.8 | 762.4 | 757.3 |
| 172.5° | 764.7 | 760.7 | 761.8 | 765.8 | 760.7 |
| 175°   | 766.9 | 763.5 | 764.1 | 768.6 | 763.5 |
| 177.5° | 768.6 | 765.2 | 765.8 | 769.8 | 765.2 |
| 180°   | 766.9 | 766.9 | 766.9 | 766.9 | 766.9 |

(END OF REPORT)