

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: P1025907

Luminaire Tested: S124DIP-B795D810UB35-4F0-XX-W2A-D4

Issue Date: 5/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1025907  
REPORT IS A COMBINATION OF REPORTS P996597 AND P1007351  
Test Lab: INNOVATION CENTER  
Issue Date: 5/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S124DIP-B795D810UB35-4F0-XX-W2A-D4  
Description: Define 4 Direct/Indirect Pendant with 3500K BioUP LEDs {m-DER=0.721} {m-EER=0.792}  
Light Source: -  
Ballast/Driver: -

**Summary**

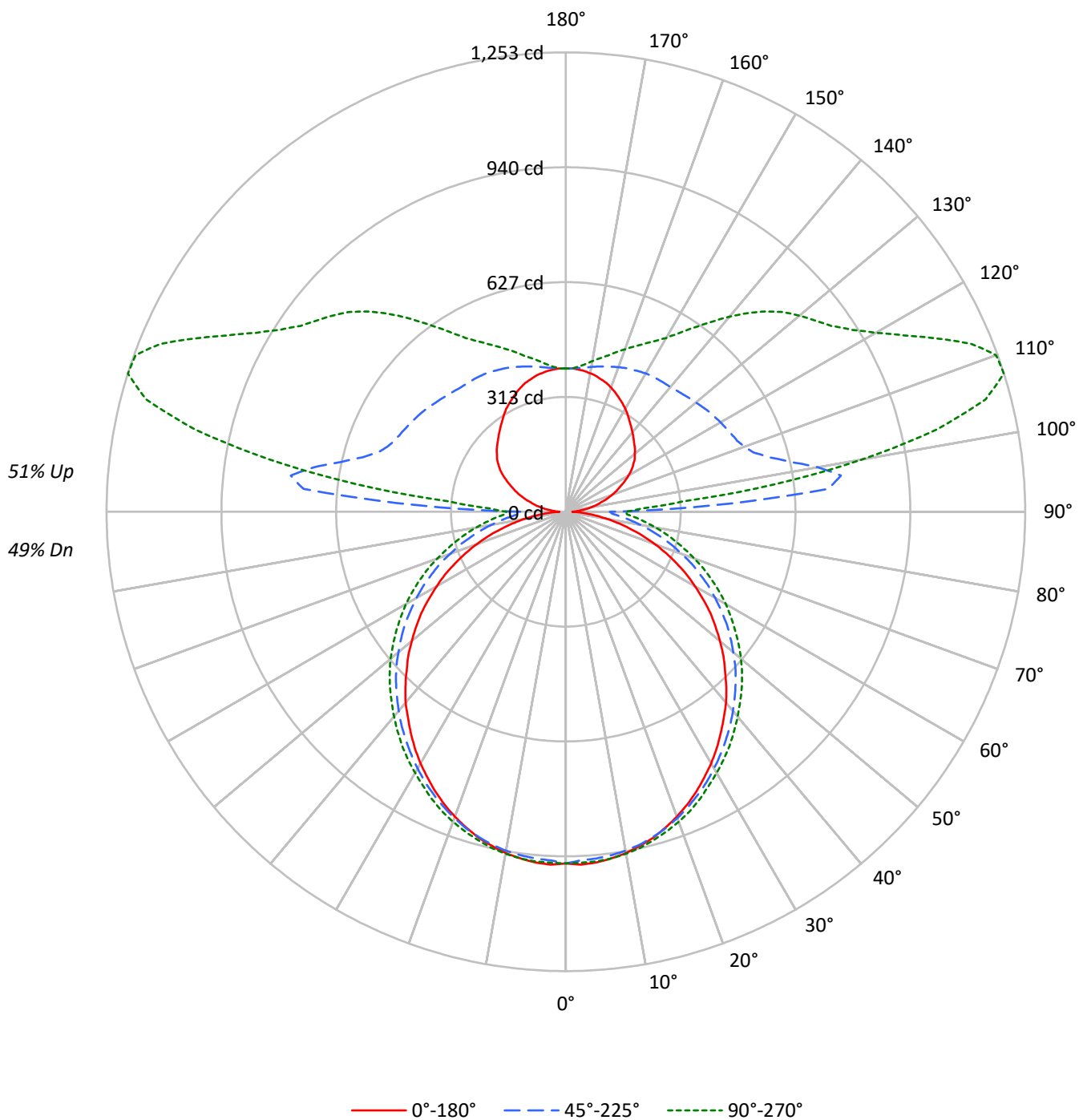
Lumens per Lamp: N/A  
Luminaire Lumens: 6120.7 lumens  
Efficiency: N/A  
Efficacy: 107.4 lumens/watt  
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39  
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')  
CIE Type: General Diffuse

Input Watts (W): 57  
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   | 107 | 107 | 107 | 107 | 99 | 99 | 99 | 99 | 83 | 83 | 83 | 69 | 69 | 69 | 56 | 56 | 56 |
| 1   | 97  | 92  | 88  | 84  | 89 | 85 | 81 | 78 | 71 | 69 | 66 | 59 | 57 | 55 | 48 | 46 | 45 |
| 2   | 88  | 80  | 73  | 68  | 80 | 73 | 68 | 63 | 62 | 58 | 54 | 51 | 48 | 45 | 41 | 39 | 37 |
| 3   | 80  | 70  | 62  | 56  | 73 | 64 | 58 | 52 | 54 | 49 | 45 | 45 | 41 | 38 | 36 | 33 | 31 |
| 4   | 73  | 61  | 53  | 47  | 67 | 57 | 49 | 44 | 48 | 42 | 38 | 40 | 36 | 32 | 32 | 29 | 26 |
| 5   | 67  | 55  | 46  | 40  | 61 | 50 | 43 | 37 | 43 | 37 | 32 | 36 | 31 | 28 | 29 | 26 | 23 |
| 6   | 61  | 49  | 40  | 34  | 56 | 45 | 38 | 32 | 38 | 33 | 28 | 32 | 27 | 24 | 26 | 23 | 20 |
| 7   | 57  | 44  | 36  | 30  | 52 | 41 | 33 | 28 | 35 | 29 | 25 | 29 | 25 | 21 | 24 | 20 | 18 |
| 8   | 52  | 40  | 32  | 26  | 48 | 37 | 30 | 25 | 32 | 26 | 22 | 27 | 22 | 19 | 22 | 18 | 16 |
| 9   | 49  | 36  | 29  | 23  | 45 | 34 | 27 | 22 | 29 | 23 | 19 | 24 | 20 | 17 | 20 | 17 | 14 |
| 10  | 46  | 33  | 26  | 21  | 42 | 31 | 24 | 20 | 27 | 21 | 17 | 22 | 18 | 15 | 19 | 15 | 13 |

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

|     | 0°   | 45°  | 90°  |
|-----|------|------|------|
| 0°  | 7821 | 7821 | 7821 |
| 5°  | 7843 | 7617 | 7631 |
| 10° | 7791 | 7467 | 7446 |
| 15° | 7718 | 7299 | 7237 |
| 20° | 7611 | 7116 | 7034 |
| 25° | 7489 | 6915 | 6816 |
| 30° | 7357 | 6715 | 6593 |
| 35° | 7208 | 6512 | 6395 |
| 40° | 7089 | 6317 | 6190 |
| 45° | 6911 | 6133 | 6008 |
| 50° | 6761 | 5924 | 5816 |
| 55° | 6605 | 5723 | 5595 |
| 60° | 6364 | 5473 | 5387 |
| 65° | 6097 | 5203 | 5138 |
| 70° | 5774 | 4896 | 4849 |
| 75° | 5323 | 4553 | 4573 |
| 80° | 4816 | 4204 | 4286 |
| 85° | 4141 | 3854 | 4052 |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 6911 cd/sqm

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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 90.9   | 1.5       |
| 10°-20°   | 260.4  | 4.3       |
| 20°-30°   | 393.7  | 6.4       |
| 30°-40°   | 476.3  | 7.8       |
| 40°-50°   | 503.5  | 8.2       |
| 50°-60°   | 473.9  | 7.7       |
| 60°-70°   | 393.2  | 6.4       |
| 70°-80°   | 276.0  | 4.5       |
| 80°-90°   | 157.1  | 2.6       |
| 90°-100°  | 382.6  | 6.3       |
| 100°-110° | 658.4  | 10.8      |
| 110°-120° | 571.7  | 9.3       |
| 120°-130° | 467.6  | 7.6       |
| 130°-140° | 379.7  | 6.2       |
| 140°-150° | 283.7  | 4.6       |
| 150°-160° | 197.8  | 3.2       |
| 160°-170° | 116.4  | 1.9       |
| 170°-180° | 37.8   | 0.6       |
| 0°-30°    | 744.9  | 12.2      |
| 0°-40°    | 1221.2 | 20.0      |
| 0°-60°    | 2198.6 | 35.9      |
| 0°-90°    | 3024.9 | 49.4      |
| 90°-120°  | 1612.8 | 26.3      |
| 90°-150°  | 2743.7 | 44.8      |
| 90°-180°  | 3096.0 | 50.6      |
| 0°-180°   | 6120.7 | 100.0     |

**CANDELA DISTRIBUTION:**

|      | 0°  | 22.5° | 45° | 67.5° | 90°  | Flux |
|------|-----|-------|-----|-------|------|------|
| 0°   | 959 | 959   | 959 | 959   | 959  |      |
| 5°   | 960 | 957   | 949 | 958   | 957  | 91   |
| 15°  | 920 | 922   | 918 | 928   | 927  | 259  |
| 25°  | 842 | 848   | 852 | 864   | 865  | 388  |
| 35°  | 737 | 750   | 760 | 776   | 779  | 461  |
| 45°  | 614 | 635   | 655 | 673   | 679  | 475  |
| 55°  | 481 | 504   | 536 | 557   | 564  | 429  |
| 65°  | 333 | 367   | 404 | 431   | 439  | 330  |
| 75°  | 185 | 224   | 270 | 300   | 309  | 196  |
| 85°  | 57  | 102   | 150 | 183   | 193  | 59   |
| 90°  | 18  | 66    | 120 | 153   | 162  | 13   |
| 95°  | 39  | 129   | 718 | 432   | 319  | 39   |
| 105° | 99  | 161   | 574 | 1181  | 1186 | 107  |
| 115° | 164 | 214   | 499 | 936   | 1118 | 164  |
| 125° | 224 | 265   | 476 | 784   | 884  | 200  |
| 135° | 264 | 314   | 452 | 678   | 773  | 204  |
| 145° | 302 | 345   | 440 | 556   | 614  | 190  |
| 155° | 343 | 370   | 428 | 485   | 506  | 158  |
| 165° | 374 | 385   | 410 | 434   | 441  | 106  |
| 175° | 390 | 390   | 394 | 399   | 397  | 37   |
| 180° | 390 | 390   | 390 | 390   | 390  |      |

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**CANDELA DISTRIBUTION (FULL):**

|        | 0°    | 22.5° | 45°   | 67.5°  | 90°    |
|--------|-------|-------|-------|--------|--------|
| 0°     | 959.1 | 959.1 | 959.1 | 959.1  | 959.1  |
| 2.5°   | 963.4 | 960.2 | 951.6 | 959.1  | 958.0  |
| 5°     | 960.2 | 957.0 | 949.4 | 958.0  | 957.0  |
| 7.5°   | 953.7 | 951.6 | 945.1 | 954.8  | 953.7  |
| 10°    | 945.1 | 944.1 | 938.7 | 948.4  | 947.3  |
| 12.5°  | 933.3 | 933.3 | 930.1 | 938.7  | 938.7  |
| 15°    | 920.4 | 921.5 | 918.3 | 928.0  | 926.9  |
| 17.5°  | 903.3 | 906.5 | 905.4 | 915.1  | 914.0  |
| 20°    | 885.0 | 888.2 | 889.3 | 900.0  | 900.0  |
| 22.5°  | 864.6 | 868.9 | 871.0 | 881.8  | 883.9  |
| 25°    | 842.0 | 848.5 | 851.7 | 863.5  | 864.6  |
| 27.5°  | 817.3 | 827.0 | 831.3 | 842.0  | 843.1  |
| 30°    | 792.6 | 801.2 | 808.7 | 820.6  | 822.7  |
| 32.5°  | 765.8 | 776.5 | 785.1 | 799.1  | 801.2  |
| 35°    | 736.8 | 749.7 | 760.4 | 775.5  | 778.7  |
| 37.5°  | 707.8 | 722.8 | 735.7 | 750.7  | 754.0  |
| 40°    | 679.9 | 693.8 | 708.9 | 725.0  | 729.3  |
| 42.5°  | 647.6 | 663.8 | 682.0 | 700.3  | 703.5  |
| 45°    | 614.3 | 634.8 | 655.2 | 673.4  | 678.8  |
| 47.5°  | 583.2 | 603.6 | 627.2 | 645.5  | 651.9  |
| 50°    | 548.8 | 572.5 | 596.1 | 617.6  | 624.0  |
| 52.5°  | 514.5 | 538.1 | 566.0 | 587.5  | 593.9  |
| 55°    | 481.2 | 503.7 | 535.9 | 557.4  | 563.9  |
| 57.5°  | 443.6 | 471.5 | 502.6 | 528.4  | 533.8  |
| 60°    | 407.1 | 435.0 | 470.4 | 495.1  | 503.7  |
| 62.5°  | 371.6 | 402.8 | 438.2 | 462.9  | 471.5  |
| 65°    | 332.9 | 367.3 | 403.8 | 430.7  | 439.3  |
| 67.5°  | 296.4 | 332.9 | 371.6 | 398.5  | 407.1  |
| 70°    | 258.8 | 295.4 | 336.2 | 365.2  | 372.7  |
| 72.5°  | 222.3 | 259.9 | 304.0 | 331.9  | 340.5  |
| 75°    | 184.7 | 224.5 | 269.6 | 299.7  | 309.3  |
| 77.5°  | 149.3 | 191.2 | 238.4 | 268.5  | 279.2  |
| 80°    | 117.1 | 160.0 | 207.3 | 239.5  | 248.1  |
| 82.5°  | 84.8  | 130.0 | 177.2 | 210.5  | 220.2  |
| 85°    | 56.9  | 102.0 | 150.4 | 182.6  | 193.3  |
| 87.5°  | 35.4  | 79.5  | 126.7 | 157.9  | 167.5  |
| 90°    | 18.0  | 66.2  | 120.1 | 152.8  | 162.2  |
| 92.5°  | 26.8  | 112.8 | 400.6 | 229.3  | 208.4  |
| 95°    | 39.3  | 129.2 | 718.5 | 431.9  | 319.3  |
| 97.5°  | 55.1  | 132.2 | 756.9 | 748.0  | 575.2  |
| 100°   | 70.1  | 139.4 | 698.3 | 985.0  | 821.5  |
| 102.5° | 85.4  | 148.9 | 627.8 | 1130.4 | 1037.1 |
| 105°   | 99.4  | 161.1 | 574.1 | 1181.1 | 1185.5 |
| 107.5° | 117.1 | 174.8 | 537.2 | 1158.6 | 1252.7 |
| 110°   | 133.6 | 187.4 | 518.3 | 1090.7 | 1248.9 |

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**CANDELA DISTRIBUTION (continued):**

|        | 0°    | 22.5° | 45°   | 67.5°  | 90°    |
|--------|-------|-------|-------|--------|--------|
| 112.5° | 149.4 | 201.0 | 506.0 | 1009.1 | 1197.2 |
| 115°   | 164.4 | 214.4 | 499.2 | 936.2  | 1117.8 |
| 117.5° | 181.3 | 227.6 | 493.0 | 876.9  | 1041.2 |
| 120°   | 197.2 | 239.4 | 487.6 | 834.8  | 976.4  |
| 122.5° | 212.5 | 252.0 | 481.6 | 806.0  | 924.0  |
| 125°   | 224.4 | 264.8 | 476.5 | 784.2  | 883.7  |
| 127.5° | 236.7 | 278.6 | 469.6 | 762.0  | 857.0  |
| 130°   | 245.6 | 290.9 | 463.4 | 737.8  | 832.1  |
| 132.5° | 255.5 | 302.4 | 458.3 | 710.2  | 805.9  |
| 135°   | 263.7 | 313.5 | 452.3 | 678.1  | 772.7  |
| 137.5° | 272.9 | 322.1 | 448.0 | 645.0  | 734.9  |
| 140°   | 282.8 | 330.9 | 443.9 | 612.8  | 694.9  |
| 142.5° | 292.6 | 339.0 | 441.8 | 583.6  | 652.7  |
| 145°   | 302.5 | 345.2 | 440.3 | 555.6  | 614.3  |
| 147.5° | 314.0 | 352.0 | 438.0 | 531.5  | 578.4  |
| 150°   | 324.8 | 358.6 | 435.7 | 513.1  | 547.6  |
| 152.5° | 333.7 | 364.7 | 431.8 | 498.6  | 524.6  |
| 155°   | 342.9 | 370.0 | 428.0 | 484.8  | 505.5  |
| 157.5° | 352.1 | 375.1 | 424.2 | 471.8  | 487.8  |
| 160°   | 360.5 | 379.3 | 419.6 | 458.6  | 471.7  |
| 162.5° | 368.2 | 382.8 | 415.0 | 446.0  | 456.4  |
| 165°   | 373.5 | 385.0 | 410.4 | 434.5  | 441.0  |
| 167.5° | 379.7 | 387.0 | 405.8 | 424.6  | 428.8  |
| 170°   | 383.5 | 388.5 | 401.1 | 414.6  | 417.3  |
| 172.5° | 387.3 | 389.6 | 396.5 | 405.8  | 405.8  |
| 175°   | 389.6 | 390.4 | 393.5 | 398.8  | 397.3  |
| 177.5° | 391.2 | 390.4 | 391.2 | 393.8  | 391.2  |
| 180°   | 390.4 | 390.4 | 390.4 | 390.4  | 390.4  |

(END OF REPORT)