

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: P1026564

Luminaire Tested: S124RDIP-B795D1205UB27-4F0-XX-W2A-F4

Issue Date: 5/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1026564  
REPORT IS A COMBINATION OF REPORTS P999664 AND P1007351  
Test Lab: INNOVATION CENTER  
Issue Date: 5/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S124RDIP-B795D1205UB27-4F0-XX-W2A-F4  
Description: Define 4 Regressed Direct/Indirect Pendant with 2700K BioUP LEDs {m-DER=0.473}  
{m-EER=0.52}  
Light Source: -  
Ballast/Driver: -

**Summary**

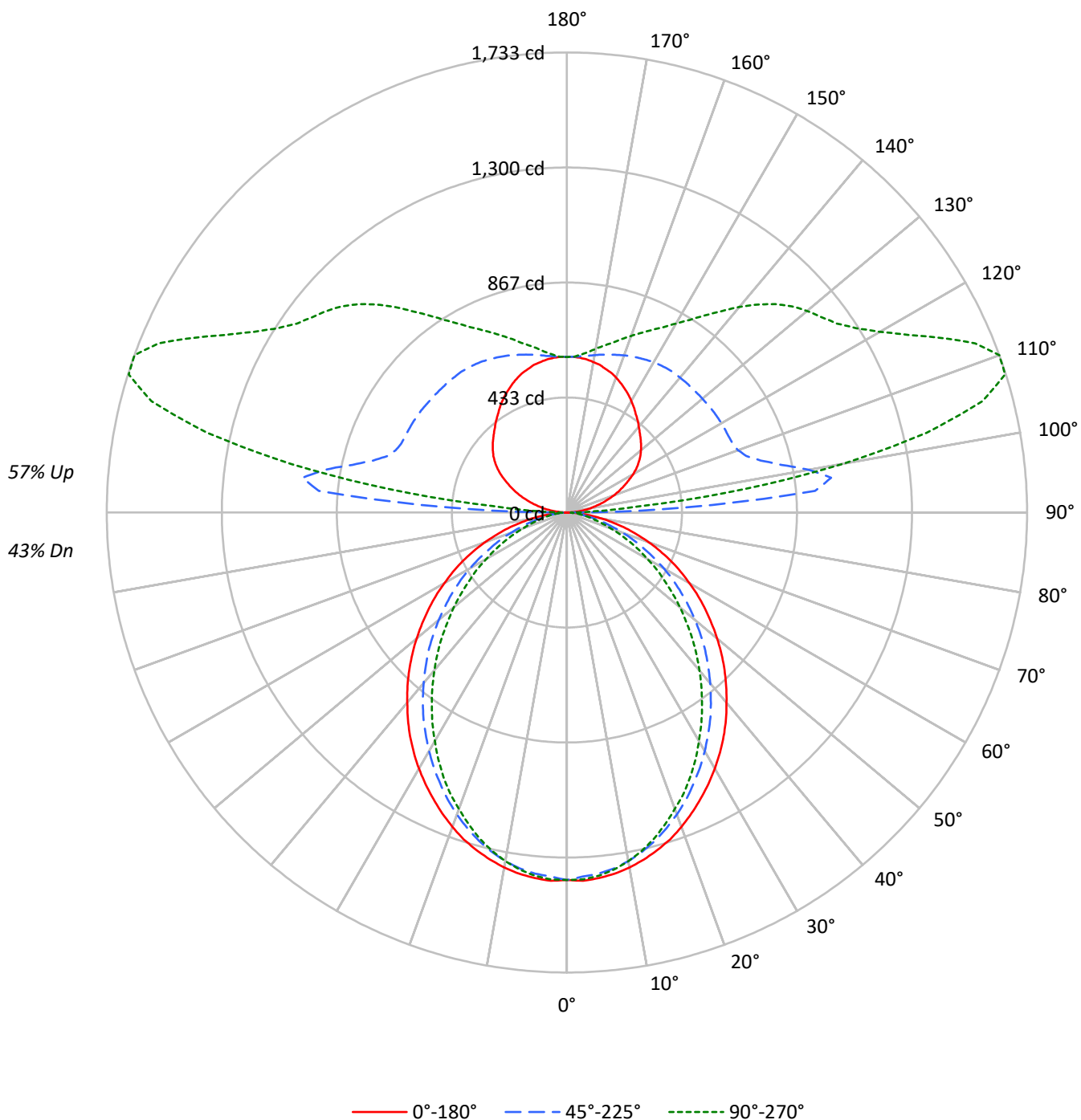
Lumens per Lamp: N/A  
Luminaire Lumens: 7477.6 lumens  
Efficiency: N/A  
Efficacy: 105.5 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.09 / 1.24  
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')  
CIE Type: General Diffuse

Input Watts (W): 70.9  
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   | 105 | 105 | 105 | 105 | 96 | 96 | 96 | 96 | 79 | 79 | 79 | 64 | 64 | 64 | 50 | 50 | 50 |
| 1   | 96  | 92  | 88  | 85  | 88 | 84 | 81 | 78 | 70 | 68 | 66 | 56 | 55 | 54 | 44 | 43 | 42 |
| 2   | 88  | 81  | 75  | 70  | 80 | 74 | 69 | 65 | 61 | 58 | 55 | 50 | 47 | 45 | 39 | 37 | 36 |
| 3   | 80  | 71  | 64  | 58  | 73 | 65 | 59 | 54 | 54 | 50 | 46 | 44 | 41 | 38 | 35 | 33 | 31 |
| 4   | 74  | 63  | 55  | 50  | 67 | 58 | 51 | 46 | 48 | 43 | 39 | 40 | 36 | 33 | 31 | 29 | 27 |
| 5   | 68  | 56  | 48  | 42  | 62 | 52 | 45 | 40 | 43 | 38 | 34 | 36 | 32 | 29 | 28 | 26 | 23 |
| 6   | 62  | 50  | 43  | 37  | 57 | 47 | 40 | 34 | 39 | 34 | 30 | 32 | 28 | 25 | 26 | 23 | 21 |
| 7   | 58  | 46  | 38  | 32  | 53 | 42 | 35 | 30 | 35 | 30 | 26 | 29 | 25 | 22 | 23 | 21 | 18 |
| 8   | 53  | 41  | 34  | 29  | 49 | 38 | 32 | 27 | 32 | 27 | 23 | 27 | 23 | 20 | 22 | 19 | 17 |
| 9   | 50  | 38  | 30  | 25  | 45 | 35 | 28 | 24 | 30 | 25 | 21 | 25 | 21 | 18 | 20 | 17 | 15 |
| 10  | 46  | 35  | 28  | 23  | 43 | 32 | 26 | 22 | 27 | 22 | 19 | 23 | 19 | 16 | 19 | 16 | 14 |

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

|     | 0°    | 45°   | 90°   |
|-----|-------|-------|-------|
| 0°  | 11290 | 11290 | 11290 |
| 5°  | 11291 | 10954 | 10956 |
| 10° | 11195 | 10609 | 10482 |
| 15° | 11041 | 10178 | 9925  |
| 20° | 10840 | 9688  | 9288  |
| 25° | 10588 | 9158  | 8666  |
| 30° | 10342 | 8618  | 7969  |
| 35° | 10071 | 8071  | 7287  |
| 40° | 9749  | 7481  | 6586  |
| 45° | 9446  | 6897  | 5892  |
| 50° | 9103  | 6258  | 5188  |
| 55° | 8732  | 5603  | 4460  |
| 60° | 8319  | 4909  | 3741  |
| 65° | 7921  | 4112  | 3050  |
| 70° | 7356  | 3272  | 2331  |
| 75° | 6628  | 2381  | 1629  |
| 80° | 5536  | 1462  | 1171  |
| 85° | 4162  | 843   | 643   |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 9446 cd/sqm

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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 130.2  | 1.7       |
| 10°-20°   | 363.0  | 4.9       |
| 20°-30°   | 524.1  | 7.0       |
| 30°-40°   | 593.9  | 7.9       |
| 40°-50°   | 573.5  | 7.7       |
| 50°-60°   | 476.8  | 6.4       |
| 60°-70°   | 329.1  | 4.4       |
| 70°-80°   | 166.3  | 2.2       |
| 80°-90°   | 44.5   | 0.6       |
| 90°-100°  | 435.3  | 5.8       |
| 100°-110° | 885.3  | 11.8      |
| 110°-120° | 789.1  | 10.6      |
| 120°-130° | 662.8  | 8.9       |
| 130°-140° | 553.1  | 7.4       |
| 140°-150° | 422.4  | 5.6       |
| 150°-160° | 296.9  | 4.0       |
| 160°-170° | 174.6  | 2.3       |
| 170°-180° | 56.8   | 0.8       |
| 0°-30°    | 1017.2 | 13.6      |
| 0°-40°    | 1611.2 | 21.5      |
| 0°-60°    | 2661.4 | 35.6      |
| 0°-90°    | 3201.3 | 42.8      |
| 90°-120°  | 2109.6 | 28.2      |
| 90°-150°  | 3748.0 | 50.1      |
| 90°-180°  | 4276.0 | 57.2      |
| 0°-180°   | 7477.6 | 100.0     |

**CANDELA DISTRIBUTION:**

|      | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|------|------|-------|------|-------|------|------|
| 0°   | 1384 | 1384  | 1384 | 1384  | 1384 |      |
| 5°   | 1382 | 1378  | 1365 | 1376  | 1374 | 131  |
| 15°  | 1317 | 1307  | 1281 | 1278  | 1271 | 371  |
| 25°  | 1190 | 1171  | 1128 | 1110  | 1099 | 549  |
| 35°  | 1029 | 995   | 942  | 906   | 887  | 643  |
| 45°  | 840  | 800   | 737  | 685   | 666  | 647  |
| 55°  | 636  | 594   | 525  | 470   | 450  | 569  |
| 65°  | 432  | 387   | 319  | 274   | 261  | 427  |
| 75°  | 230  | 191   | 141  | 117   | 110  | 243  |
| 85°  | 57   | 36    | 33   | 31    | 31   | 63   |
| 90°  | 1    | 9     | 21   | 23    | 24   | 6    |
| 95°  | 38   | 120   | 938  | 464   | 281  | 42   |
| 105° | 135  | 195   | 755  | 1626  | 1620 | 143  |
| 115° | 237  | 298   | 674  | 1294  | 1555 | 235  |
| 125° | 330  | 392   | 670  | 1101  | 1241 | 294  |
| 135° | 393  | 467   | 664  | 977   | 1110 | 303  |
| 145° | 452  | 518   | 661  | 824   | 906  | 284  |
| 155° | 515  | 555   | 642  | 728   | 759  | 237  |
| 165° | 561  | 578   | 616  | 652   | 662  | 158  |
| 175° | 585  | 586   | 591  | 599   | 596  | 56   |
| 180° | 586  | 586   | 586  | 586   | 586  |      |

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**CANDELA DISTRIBUTION (FULL):**

|        | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|--------|--------|--------|--------|--------|--------|
| 0°     | 1384.5 | 1384.5 | 1384.5 | 1384.5 | 1384.5 |
| 2.5°   | 1388.7 | 1384.5 | 1372.8 | 1384.5 | 1383.4 |
| 5°     | 1382.4 | 1378.1 | 1365.4 | 1376.0 | 1373.9 |
| 7.5°   | 1372.8 | 1368.6 | 1352.7 | 1360.1 | 1356.9 |
| 10°    | 1358.0 | 1352.7 | 1333.6 | 1337.8 | 1333.6 |
| 12.5°  | 1338.9 | 1332.5 | 1309.2 | 1311.3 | 1305.0 |
| 15°    | 1316.6 | 1307.1 | 1280.6 | 1278.5 | 1271.1 |
| 17.5°  | 1291.2 | 1277.4 | 1246.7 | 1241.4 | 1230.8 |
| 20°    | 1260.5 | 1246.7 | 1210.6 | 1202.1 | 1188.4 |
| 22.5°  | 1226.5 | 1210.6 | 1171.4 | 1157.6 | 1147.0 |
| 25°    | 1190.5 | 1171.4 | 1127.9 | 1109.9 | 1099.3 |
| 27.5°  | 1153.4 | 1130.1 | 1084.5 | 1063.3 | 1048.4 |
| 30°    | 1114.2 | 1087.7 | 1037.8 | 1011.3 | 994.4  |
| 32.5°  | 1072.8 | 1042.1 | 990.1  | 958.3  | 942.4  |
| 35°    | 1029.4 | 995.4  | 942.4  | 906.4  | 887.3  |
| 37.5°  | 983.8  | 948.8  | 890.5  | 851.3  | 832.2  |
| 40°    | 935.0  | 900.0  | 839.6  | 795.1  | 776.0  |
| 42.5°  | 888.4  | 851.3  | 787.7  | 742.1  | 721.9  |
| 45°    | 839.6  | 800.4  | 736.8  | 684.8  | 665.7  |
| 47.5°  | 789.8  | 749.5  | 683.8  | 629.7  | 608.5  |
| 50°    | 738.9  | 697.5  | 629.7  | 576.7  | 556.6  |
| 52.5°  | 686.9  | 646.7  | 576.7  | 522.6  | 501.4  |
| 55°    | 636.1  | 593.7  | 524.7  | 469.6  | 449.5  |
| 57.5°  | 586.2  | 541.7  | 473.9  | 417.7  | 402.8  |
| 60°    | 532.2  | 489.8  | 421.9  | 366.8  | 349.8  |
| 62.5°  | 483.4  | 438.9  | 368.9  | 319.1  | 306.4  |
| 65°    | 432.5  | 386.9  | 319.1  | 273.5  | 260.8  |
| 67.5°  | 379.5  | 336.1  | 272.4  | 232.2  | 217.3  |
| 70°    | 329.7  | 285.2  | 224.7  | 189.8  | 179.2  |
| 72.5°  | 276.7  | 237.5  | 181.3  | 152.7  | 143.1  |
| 75°    | 230.0  | 190.8  | 141.0  | 116.6  | 110.2  |
| 77.5°  | 181.3  | 147.4  | 104.9  | 88.0   | 85.9   |
| 80°    | 134.6  | 103.9  | 72.1   | 68.9   | 67.8   |
| 82.5°  | 94.3   | 66.8   | 51.9   | 49.8   | 48.8   |
| 85°    | 57.2   | 36.0   | 32.9   | 30.7   | 30.7   |
| 87.5°  | 24.4   | 15.9   | 14.8   | 13.8   | 14.8   |
| 90°    | 1.2    | 9.2    | 20.7   | 23.0   | 24.2   |
| 92.5°  | 16.1   | 88.6   | 451.3  | 149.1  | 104.8  |
| 95°    | 38.0   | 119.7  | 938.2  | 464.5  | 280.9  |
| 97.5°  | 63.3   | 132.4  | 1003.8 | 948.6  | 674.6  |
| 100°   | 87.5   | 149.6  | 925.6  | 1312.4 | 1055.6 |
| 102.5° | 110.5  | 170.4  | 827.7  | 1540.3 | 1387.2 |
| 105°   | 134.7  | 195.1  | 755.2  | 1626.1 | 1619.7 |
| 107.5° | 161.2  | 220.4  | 708.0  | 1600.2 | 1730.3 |
| 110°   | 187.6  | 245.8  | 686.1  | 1508.1 | 1732.6 |

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**CANDELA DISTRIBUTION (continued):**

|        | 0°    | 22.5° | 45°   | 67.5°  | 90°    |
|--------|-------|-------|-------|--------|--------|
| 112.5° | 213.0 | 271.1 | 675.8 | 1395.2 | 1664.6 |
| 115°   | 237.1 | 297.6 | 673.5 | 1294.0 | 1555.3 |
| 117.5° | 262.5 | 322.4 | 672.3 | 1214.6 | 1448.2 |
| 120°   | 287.8 | 346.5 | 672.3 | 1161.0 | 1360.7 |
| 122.5° | 310.8 | 370.2 | 671.1 | 1125.8 | 1291.6 |
| 125°   | 330.4 | 392.5 | 670.0 | 1101.2 | 1241.0 |
| 127.5° | 348.8 | 413.3 | 667.7 | 1077.6 | 1208.8 |
| 130°   | 363.8 | 433.4 | 666.5 | 1049.3 | 1181.1 |
| 132.5° | 378.7 | 450.7 | 665.4 | 1015.9 | 1150.0 |
| 135°   | 392.6 | 467.4 | 664.2 | 977.4  | 1109.8 |
| 137.5° | 406.4 | 481.8 | 664.2 | 935.9  | 1062.6 |
| 140°   | 421.3 | 495.0 | 663.1 | 895.6  | 1010.8 |
| 142.5° | 437.5 | 507.1 | 663.1 | 858.2  | 955.5  |
| 145°   | 452.4 | 518.0 | 660.8 | 824.2  | 906.0  |
| 147.5° | 469.7 | 528.4 | 657.3 | 796.0  | 859.9  |
| 150°   | 485.8 | 538.2 | 653.9 | 770.2  | 822.0  |
| 152.5° | 500.8 | 547.4 | 648.1 | 748.2  | 787.4  |
| 155°   | 514.6 | 555.4 | 642.4 | 727.6  | 758.6  |
| 157.5° | 528.4 | 562.9 | 636.6 | 708.0  | 732.2  |
| 160°   | 541.1 | 569.2 | 629.7 | 688.4  | 708.0  |
| 162.5° | 552.6 | 574.4 | 622.8 | 669.4  | 685.0  |
| 165°   | 560.6 | 577.9 | 615.9 | 652.2  | 661.9  |
| 167.5° | 569.8 | 580.8 | 609.0 | 637.2  | 643.5  |
| 170°   | 575.6 | 583.1 | 602.1 | 622.2  | 626.3  |
| 172.5° | 581.4 | 584.8 | 595.2 | 609.0  | 609.0  |
| 175°   | 584.8 | 586.0 | 590.6 | 598.6  | 596.3  |
| 177.5° | 587.1 | 586.0 | 587.1 | 591.2  | 587.1  |
| 180°   | 586.0 | 586.0 | 586.0 | 586.0  | 586.0  |

(END OF REPORT)