

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: P1026605

Luminaire Tested: S124RDIP-B795D365UB35-4F0-XX-W2A-F1

Issue Date: 5/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1026605  
REPORT IS A COMBINATION OF REPORTS P999725 AND P1007351  
Test Lab: INNOVATION CENTER  
Issue Date: 5/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S124RDIP-B795D365UB35-4F0-XX-W2A-F1  
Description: Define 4 Regressed Direct/Indirect Pendant with 3500K BioUP LEDs {m-DER=0.721}  
{m-EER=0.792}  
Light Source: -  
Ballast/Driver: -

**Summary**

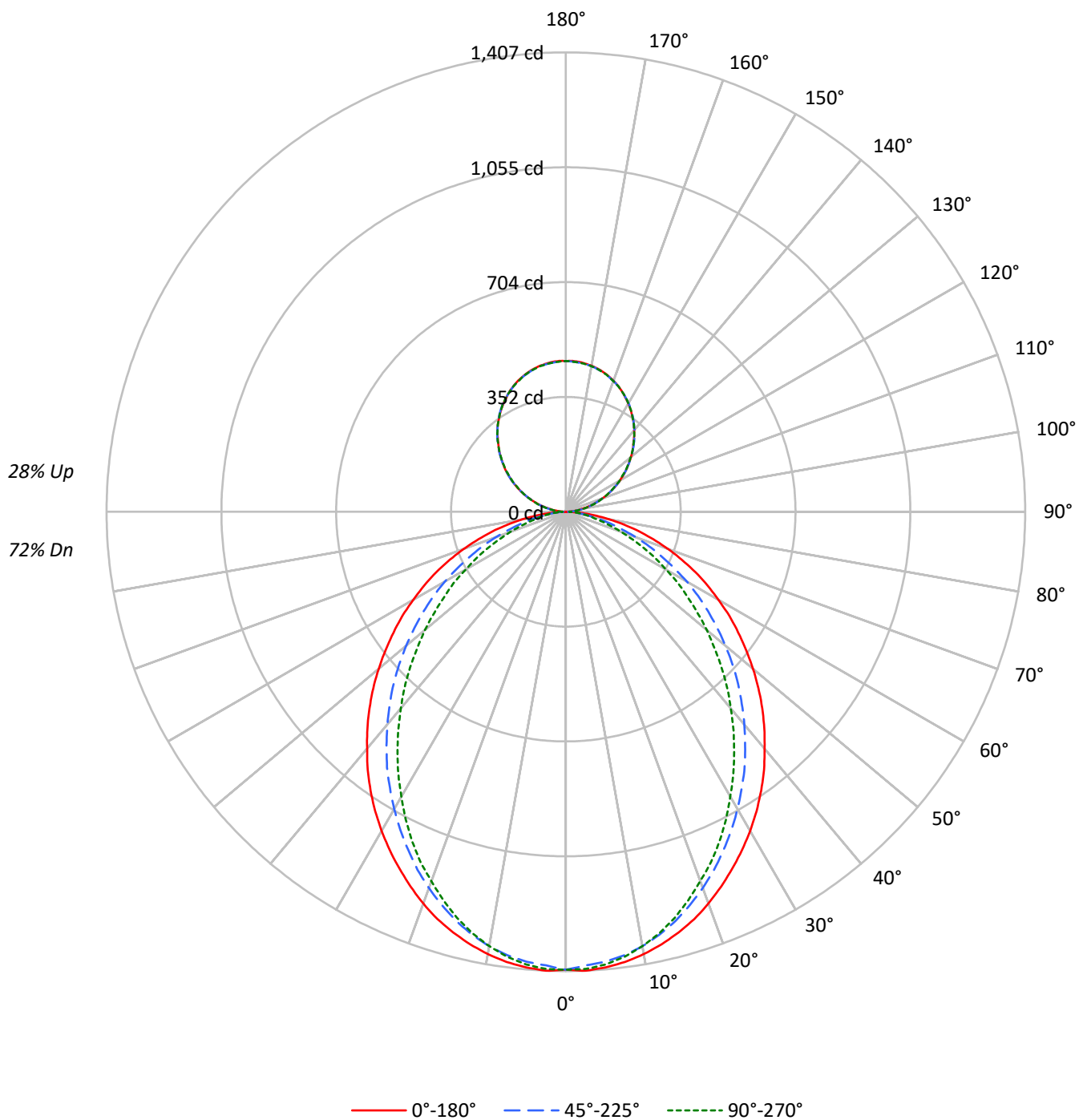
Lumens per Lamp: N/A  
Luminaire Lumens: 4523.0 lumens  
Efficiency: N/A  
Efficacy: 100.1 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.09 / 1.24  
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')  
CIE Type: Semi-Direct

Input Watts (W): 45.2  
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   | 112 | 112 | 112 | 112 | 106 | 106 | 106 | 106 | 95 | 95 | 95 | 85 | 85 | 85 | 76 | 76 | 76 |
| 1   | 103 | 99  | 95  | 91  | 98  | 94  | 90  | 87  | 84 | 82 | 79 | 76 | 74 | 72 | 68 | 66 | 65 |
| 2   | 94  | 87  | 81  | 75  | 89  | 82  | 77  | 72  | 74 | 70 | 66 | 67 | 64 | 61 | 60 | 58 | 55 |
| 3   | 86  | 77  | 69  | 63  | 81  | 73  | 66  | 61  | 66 | 61 | 56 | 60 | 55 | 52 | 54 | 50 | 48 |
| 4   | 79  | 68  | 60  | 54  | 75  | 65  | 58  | 52  | 59 | 53 | 48 | 53 | 49 | 45 | 48 | 44 | 41 |
| 5   | 73  | 61  | 53  | 47  | 69  | 58  | 51  | 45  | 53 | 47 | 42 | 48 | 43 | 39 | 44 | 40 | 36 |
| 6   | 67  | 55  | 47  | 41  | 64  | 53  | 45  | 40  | 48 | 42 | 37 | 44 | 38 | 35 | 40 | 35 | 32 |
| 7   | 62  | 50  | 42  | 36  | 59  | 48  | 40  | 35  | 44 | 37 | 33 | 40 | 35 | 31 | 36 | 32 | 29 |
| 8   | 58  | 45  | 38  | 32  | 55  | 44  | 36  | 31  | 40 | 34 | 29 | 37 | 31 | 28 | 33 | 29 | 26 |
| 9   | 54  | 42  | 34  | 29  | 51  | 40  | 33  | 28  | 37 | 31 | 27 | 34 | 29 | 25 | 31 | 27 | 23 |
| 10  | 51  | 38  | 31  | 26  | 48  | 37  | 30  | 25  | 34 | 28 | 24 | 31 | 26 | 23 | 29 | 24 | 21 |

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

|     | 0°    | 45°   | 90°   |
|-----|-------|-------|-------|
| 0°  | 11438 | 11438 | 11438 |
| 5°  | 11439 | 11098 | 11099 |
| 10° | 11342 | 10748 | 10620 |
| 15° | 11186 | 10312 | 10055 |
| 20° | 10982 | 9815  | 9410  |
| 25° | 10727 | 9279  | 8781  |
| 30° | 10478 | 8732  | 8073  |
| 35° | 10203 | 8177  | 7382  |
| 40° | 9877  | 7579  | 6672  |
| 45° | 9570  | 6987  | 5970  |
| 50° | 9222  | 6341  | 5256  |
| 55° | 8846  | 5677  | 4519  |
| 60° | 8429  | 4974  | 3790  |
| 65° | 8025  | 4166  | 3090  |
| 70° | 7451  | 3316  | 2361  |
| 75° | 6717  | 2412  | 1652  |
| 80° | 5610  | 1481  | 1187  |
| 85° | 4221  | 853   | 652   |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 9570 cd/sqm

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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 131.9  | 2.9       |
| 10°-20°   | 367.8  | 8.1       |
| 20°-30°   | 530.9  | 11.7      |
| 30°-40°   | 601.7  | 13.3      |
| 40°-50°   | 581.0  | 12.8      |
| 50°-60°   | 483.0  | 10.7      |
| 60°-70°   | 333.4  | 7.4       |
| 70°-80°   | 168.5  | 3.7       |
| 80°-90°   | 43.8   | 1.0       |
| 90°-100°  | 30.1   | 0.7       |
| 100°-110° | 90.1   | 2.0       |
| 110°-120° | 153.1  | 3.4       |
| 120°-130° | 201.9  | 4.5       |
| 130°-140° | 226.8  | 5.0       |
| 140°-150° | 222.9  | 4.9       |
| 150°-160° | 187.5  | 4.1       |
| 160°-170° | 124.8  | 2.8       |
| 170°-180° | 43.7   | 1.0       |
| 0°-30°    | 1030.6 | 22.8      |
| 0°-40°    | 1632.3 | 36.1      |
| 0°-60°    | 2696.4 | 59.6      |
| 0°-90°    | 3242.0 | 71.7      |
| 90°-120°  | 273.3  | 6.0       |
| 90°-150°  | 925.1  | 20.5      |
| 90°-180°  | 1281.0 | 28.3      |
| 0°-180°   | 4523.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|      | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|------|------|-------|------|-------|------|------|
| 0°   | 1403 | 1403  | 1403 | 1403  | 1403 |      |
| 5°   | 1400 | 1396  | 1383 | 1394  | 1392 | 133  |
| 15°  | 1334 | 1324  | 1297 | 1295  | 1288 | 376  |
| 25°  | 1206 | 1187  | 1143 | 1124  | 1114 | 556  |
| 35°  | 1043 | 1008  | 955  | 918   | 899  | 652  |
| 45°  | 851  | 811   | 746  | 694   | 674  | 656  |
| 55°  | 644  | 601   | 532  | 476   | 455  | 576  |
| 65°  | 438  | 392   | 323  | 277   | 264  | 433  |
| 75°  | 233  | 193   | 143  | 118   | 112  | 246  |
| 85°  | 58   | 36    | 33   | 31    | 31   | 64   |
| 90°  | 1    | 5     | 8    | 10    | 11   | 5    |
| 95°  | 21   | 25    | 27   | 28    | 28   | 23   |
| 105° | 83   | 84    | 85   | 86    | 87   | 88   |
| 115° | 156  | 156   | 155  | 155   | 154  | 154  |
| 125° | 227  | 227   | 226  | 226   | 225  | 202  |
| 135° | 292  | 295   | 295  | 294   | 293  | 226  |
| 145° | 355  | 357   | 357  | 357   | 356  | 222  |
| 155° | 407  | 407   | 407  | 408   | 407  | 187  |
| 165° | 443  | 442   | 441  | 444   | 442  | 125  |
| 175° | 461  | 459   | 459  | 461   | 459  | 44   |
| 180° | 462  | 462   | 462  | 462   | 462  |      |

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**CANDELA DISTRIBUTION (FULL):**

|        | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|--------|--------|--------|--------|--------|--------|
| 0°     | 1402.7 | 1402.7 | 1402.7 | 1402.7 | 1402.7 |
| 2.5°   | 1407.0 | 1402.7 | 1390.8 | 1402.7 | 1401.6 |
| 5°     | 1400.5 | 1396.2 | 1383.3 | 1394.1 | 1391.9 |
| 7.5°   | 1390.8 | 1386.6 | 1370.4 | 1378.0 | 1374.7 |
| 10°    | 1375.8 | 1370.4 | 1351.1 | 1355.4 | 1351.1 |
| 12.5°  | 1356.5 | 1350.0 | 1326.4 | 1328.6 | 1322.1 |
| 15°    | 1333.9 | 1324.3 | 1297.4 | 1295.3 | 1287.7 |
| 17.5°  | 1308.1 | 1294.2 | 1263.0 | 1257.7 | 1246.9 |
| 20°    | 1277.0 | 1263.0 | 1226.5 | 1217.9 | 1204.0 |
| 22.5°  | 1242.6 | 1226.5 | 1186.8 | 1172.8 | 1162.1 |
| 25°    | 1206.1 | 1186.8 | 1142.8 | 1124.5 | 1113.8 |
| 27.5°  | 1168.5 | 1144.9 | 1098.7 | 1077.2 | 1062.2 |
| 30°    | 1128.8 | 1101.9 | 1051.5 | 1024.6 | 1007.4 |
| 32.5°  | 1086.9 | 1055.8 | 1003.1 | 970.9  | 954.8  |
| 35°    | 1042.9 | 1008.5 | 954.8  | 918.3  | 898.9  |
| 37.5°  | 996.7  | 961.2  | 902.2  | 862.4  | 843.1  |
| 40°    | 947.3  | 911.8  | 850.6  | 805.5  | 786.2  |
| 42.5°  | 900.0  | 862.4  | 798.0  | 751.8  | 731.4  |
| 45°    | 850.6  | 810.9  | 746.4  | 693.8  | 674.5  |
| 47.5°  | 800.1  | 759.3  | 692.7  | 638.0  | 616.5  |
| 50°    | 748.6  | 706.7  | 638.0  | 584.3  | 563.9  |
| 52.5°  | 696.0  | 655.1  | 584.3  | 529.5  | 508.0  |
| 55°    | 644.4  | 601.4  | 531.6  | 475.8  | 455.4  |
| 57.5°  | 593.9  | 548.8  | 480.1  | 423.2  | 408.1  |
| 60°    | 539.2  | 496.2  | 427.5  | 371.6  | 354.4  |
| 62.5°  | 489.8  | 444.6  | 373.8  | 323.3  | 310.4  |
| 65°    | 438.2  | 392.0  | 323.3  | 277.1  | 264.2  |
| 67.5°  | 384.5  | 340.5  | 276.0  | 235.2  | 220.2  |
| 70°    | 334.0  | 288.9  | 227.7  | 192.2  | 181.5  |
| 72.5°  | 280.3  | 240.6  | 183.7  | 154.7  | 145.0  |
| 75°    | 233.1  | 193.3  | 142.8  | 118.1  | 111.7  |
| 77.5°  | 183.7  | 149.3  | 106.3  | 89.1   | 87.0   |
| 80°    | 136.4  | 105.3  | 73.0   | 69.8   | 68.7   |
| 82.5°  | 95.6   | 67.7   | 52.6   | 50.5   | 49.4   |
| 85°    | 58.0   | 36.5   | 33.3   | 31.1   | 31.1   |
| 87.5°  | 24.7   | 16.1   | 15.0   | 14.0   | 15.0   |
| 90°    | 1.1    | 5.0    | 7.9    | 10.0   | 10.7   |
| 92.5°  | 9.3    | 13.9   | 15.7   | 16.8   | 17.1   |
| 95°    | 21.4   | 24.6   | 27.1   | 28.2   | 28.2   |
| 97.5°  | 34.3   | 37.1   | 40.0   | 41.4   | 41.4   |
| 100°   | 50.0   | 51.4   | 54.6   | 55.3   | 55.3   |
| 102.5° | 66.4   | 66.8   | 69.6   | 70.7   | 71.1   |
| 105°   | 83.2   | 83.6   | 85.0   | 86.1   | 87.1   |
| 107.5° | 100.7  | 101.0  | 101.4  | 102.8  | 102.5  |
| 110°   | 118.5  | 119.3  | 118.9  | 118.2  | 119.3  |



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**CANDELA DISTRIBUTION (continued):**

|        | 0°    | 22.5° | 45°   | 67.5° | 90°   |
|--------|-------|-------|-------|-------|-------|
| 112.5° | 137.1 | 137.1 | 136.4 | 136.4 | 136.4 |
| 115°   | 155.7 | 155.7 | 155.0 | 154.6 | 154.3 |
| 117.5° | 173.2 | 173.2 | 172.8 | 171.7 | 170.7 |
| 120°   | 190.7 | 192.1 | 191.0 | 189.2 | 190.0 |
| 122.5° | 208.9 | 209.2 | 208.9 | 207.8 | 206.0 |
| 125°   | 226.7 | 226.7 | 226.4 | 225.7 | 225.0 |
| 127.5° | 242.8 | 243.9 | 243.2 | 242.4 | 242.1 |
| 130°   | 259.9 | 261.0 | 261.0 | 260.3 | 258.9 |
| 132.5° | 277.4 | 278.2 | 277.8 | 277.1 | 276.7 |
| 135°   | 292.4 | 294.6 | 294.6 | 293.9 | 292.8 |
| 137.5° | 309.2 | 310.3 | 311.0 | 309.9 | 310.3 |
| 140°   | 326.0 | 326.7 | 326.7 | 326.4 | 326.0 |
| 142.5° | 341.4 | 342.1 | 341.7 | 341.7 | 341.7 |
| 145°   | 355.3 | 356.7 | 357.1 | 356.7 | 355.6 |
| 147.5° | 369.6 | 371.3 | 371.0 | 370.6 | 370.3 |
| 150°   | 382.4 | 383.8 | 383.8 | 383.8 | 383.5 |
| 152.5° | 394.6 | 395.3 | 395.6 | 396.7 | 395.6 |
| 155°   | 407.1 | 407.1 | 406.7 | 408.1 | 406.7 |
| 157.5° | 417.8 | 417.1 | 417.1 | 418.1 | 417.1 |
| 160°   | 427.1 | 426.7 | 426.3 | 427.4 | 425.6 |
| 162.5° | 435.6 | 434.6 | 434.2 | 436.3 | 434.6 |
| 165°   | 443.1 | 442.0 | 441.3 | 443.5 | 442.0 |
| 167.5° | 449.2 | 447.8 | 447.8 | 449.9 | 447.8 |
| 170°   | 454.2 | 452.4 | 452.8 | 454.9 | 452.4 |
| 172.5° | 457.8 | 456.3 | 456.3 | 458.8 | 456.3 |
| 175°   | 461.0 | 459.2 | 458.8 | 461.3 | 458.8 |
| 177.5° | 462.4 | 460.6 | 460.6 | 463.1 | 460.3 |
| 180°   | 461.7 | 461.7 | 461.7 | 461.7 | 461.7 |

(END OF REPORT)