

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: P1026570

Luminaire Tested: S124RDIP-B795D1205UB30-4F0-XX-W2A-F4

Issue Date: 5/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1026570  
REPORT IS A COMBINATION OF REPORTS P999680 AND P1007351  
Test Lab: INNOVATION CENTER  
Issue Date: 5/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S124RDIP-B795D1205UB30-4F0-XX-W2A-F4  
Description: Define 4 Regressed Direct/Indirect Pendant with 3000K BioUP LEDs {m-DER=0.589}  
{m-EER=0.647}  
Light Source: -  
Ballast/Driver: -

**Summary**

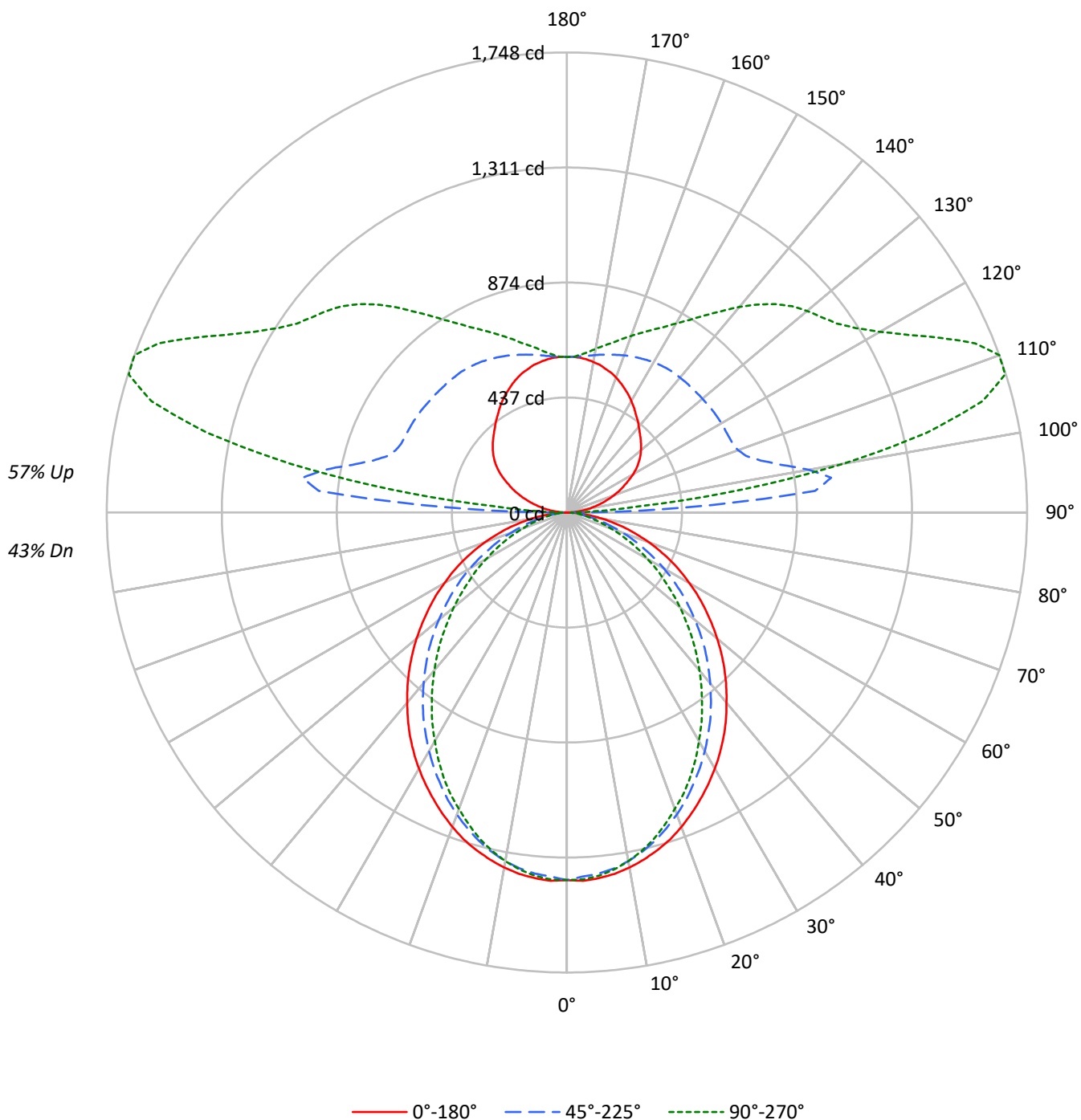
Lumens per Lamp: N/A  
Luminaire Lumens: 7542.6 lumens  
Efficiency: N/A  
Efficacy: 106.4 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.09 / 1.24  
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')  
CIE Type: General Diffuse

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°  | 11389 | 11389 | 11389 |
| 5°  | 11390 | 11051 | 11051 |
| 10° | 11293 | 10702 | 10574 |
| 15° | 11138 | 10267 | 10012 |
| 20° | 10934 | 9772  | 9370  |
| 25° | 10681 | 9238  | 8742  |
| 30° | 10432 | 8693  | 8039  |
| 35° | 10159 | 8142  | 7351  |
| 40° | 9834  | 7546  | 6644  |
| 45° | 9528  | 6957  | 5944  |
| 50° | 9183  | 6313  | 5232  |
| 55° | 8807  | 5653  | 4499  |
| 60° | 8391  | 4952  | 3774  |
| 65° | 7990  | 4148  | 3077  |
| 70° | 7420  | 3301  | 2351  |
| 75° | 6689  | 2401  | 1644  |
| 80° | 5585  | 1474  | 1182  |
| 85° | 4199  | 851   | 650   |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 9528 cd/sqm

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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 131.3  | 1.7       |
| 10°-20°   | 366.2  | 4.9       |
| 20°-30°   | 528.7  | 7.0       |
| 30°-40°   | 599.1  | 7.9       |
| 40°-50°   | 578.5  | 7.7       |
| 50°-60°   | 480.9  | 6.4       |
| 60°-70°   | 331.9  | 4.4       |
| 70°-80°   | 167.7  | 2.2       |
| 80°-90°   | 44.9   | 0.6       |
| 90°-100°  | 439.0  | 5.8       |
| 100°-110° | 893.0  | 11.8      |
| 110°-120° | 795.9  | 10.6      |
| 120°-130° | 668.6  | 8.9       |
| 130°-140° | 557.9  | 7.4       |
| 140°-150° | 426.1  | 5.6       |
| 150°-160° | 299.5  | 4.0       |
| 160°-170° | 176.2  | 2.3       |
| 170°-180° | 57.3   | 0.8       |
| 0°-30°    | 1026.2 | 13.6      |
| 0°-40°    | 1625.3 | 21.5      |
| 0°-60°    | 2684.7 | 35.6      |
| 0°-90°    | 3229.3 | 42.8      |
| 90°-120°  | 2127.9 | 28.2      |
| 90°-150°  | 3780.4 | 50.1      |
| 90°-180°  | 4313.0 | 57.2      |
| 0°-180°   | 7542.6 | 100.0     |

**CANDELA DISTRIBUTION:**

|      | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|------|------|-------|------|-------|------|------|
| 0°   | 1397 | 1397  | 1397 | 1397  | 1397 |      |
| 5°   | 1394 | 1390  | 1377 | 1388  | 1386 | 132  |
| 15°  | 1328 | 1318  | 1292 | 1290  | 1282 | 374  |
| 25°  | 1201 | 1182  | 1138 | 1120  | 1109 | 553  |
| 35°  | 1038 | 1004  | 951  | 914   | 895  | 649  |
| 45°  | 847  | 807   | 743  | 691   | 672  | 653  |
| 55°  | 642  | 599   | 529  | 474   | 453  | 574  |
| 65°  | 436  | 390   | 322  | 276   | 263  | 431  |
| 75°  | 232  | 192   | 142  | 118   | 111  | 245  |
| 85°  | 58   | 36    | 33   | 31    | 31   | 63   |
| 90°  | 1    | 9     | 21   | 23    | 24   | 6    |
| 95°  | 38   | 121   | 946  | 469   | 283  | 42   |
| 105° | 136  | 197   | 762  | 1640  | 1634 | 145  |
| 115° | 239  | 300   | 679  | 1305  | 1569 | 237  |
| 125° | 333  | 396   | 676  | 1111  | 1252 | 297  |
| 135° | 396  | 471   | 670  | 986   | 1119 | 306  |
| 145° | 456  | 523   | 666  | 831   | 914  | 286  |
| 155° | 519  | 560   | 648  | 734   | 765  | 239  |
| 165° | 566  | 583   | 621  | 658   | 668  | 160  |
| 175° | 590  | 591   | 596  | 604   | 602  | 56   |
| 180° | 591  | 591   | 591  | 591   | 591  |      |

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**CANDELA DISTRIBUTION (FULL):**

|        | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|--------|--------|--------|--------|--------|--------|
| 0°     | 1396.6 | 1396.6 | 1396.6 | 1396.6 | 1396.6 |
| 2.5°   | 1400.9 | 1396.6 | 1384.8 | 1396.6 | 1395.5 |
| 5°     | 1394.5 | 1390.2 | 1377.4 | 1388.0 | 1385.9 |
| 7.5°   | 1384.8 | 1380.6 | 1364.5 | 1372.0 | 1368.8 |
| 10°    | 1369.9 | 1364.5 | 1345.3 | 1349.6 | 1345.3 |
| 12.5°  | 1350.6 | 1344.2 | 1320.7 | 1322.8 | 1316.4 |
| 15°    | 1328.2 | 1318.5 | 1291.8 | 1289.7 | 1282.2 |
| 17.5°  | 1302.5 | 1288.6 | 1257.6 | 1252.2 | 1241.5 |
| 20°    | 1271.5 | 1257.6 | 1221.2 | 1212.7 | 1198.8 |
| 22.5°  | 1237.3 | 1221.2 | 1181.7 | 1167.8 | 1157.1 |
| 25°    | 1200.9 | 1181.7 | 1137.8 | 1119.6 | 1108.9 |
| 27.5°  | 1163.5 | 1140.0 | 1094.0 | 1072.6 | 1057.6 |
| 30°    | 1123.9 | 1097.2 | 1046.9 | 1020.2 | 1003.1 |
| 32.5°  | 1082.2 | 1051.2 | 998.8  | 966.7  | 950.7  |
| 35°    | 1038.4 | 1004.1 | 950.7  | 914.3  | 895.1  |
| 37.5°  | 992.4  | 957.1  | 898.3  | 858.7  | 839.5  |
| 40°    | 943.2  | 907.9  | 846.9  | 802.0  | 782.8  |
| 42.5°  | 896.1  | 858.7  | 794.5  | 748.6  | 728.2  |
| 45°    | 846.9  | 807.4  | 743.2  | 690.8  | 671.6  |
| 47.5°  | 796.7  | 756.0  | 689.7  | 635.2  | 613.8  |
| 50°    | 745.4  | 703.6  | 635.2  | 581.7  | 561.4  |
| 52.5°  | 693.0  | 652.3  | 581.7  | 527.2  | 505.8  |
| 55°    | 641.6  | 598.8  | 529.3  | 473.7  | 453.4  |
| 57.5°  | 591.4  | 546.5  | 478.0  | 421.3  | 406.4  |
| 60°    | 536.8  | 494.1  | 425.6  | 370.0  | 352.9  |
| 62.5°  | 487.6  | 442.7  | 372.1  | 321.9  | 309.0  |
| 65°    | 436.3  | 390.3  | 321.9  | 275.9  | 263.1  |
| 67.5°  | 382.8  | 339.0  | 274.8  | 234.2  | 219.2  |
| 70°    | 332.6  | 287.7  | 226.7  | 191.4  | 180.7  |
| 72.5°  | 279.1  | 239.5  | 182.9  | 154.0  | 144.4  |
| 75°    | 232.1  | 192.5  | 142.2  | 117.6  | 111.2  |
| 77.5°  | 182.9  | 148.6  | 105.9  | 88.8   | 86.6   |
| 80°    | 135.8  | 104.8  | 72.7   | 69.5   | 68.4   |
| 82.5°  | 95.2   | 67.4   | 52.4   | 50.3   | 49.2   |
| 85°    | 57.7   | 36.4   | 33.2   | 31.0   | 31.0   |
| 87.5°  | 24.6   | 16.0   | 15.0   | 13.9   | 15.0   |
| 90°    | 1.2    | 9.3    | 20.9   | 23.2   | 24.4   |
| 92.5°  | 16.3   | 89.4   | 455.2  | 150.4  | 105.7  |
| 95°    | 38.3   | 120.8  | 946.4  | 468.6  | 283.3  |
| 97.5°  | 63.9   | 133.5  | 1012.5 | 956.8  | 680.4  |
| 100°   | 88.2   | 151.0  | 933.6  | 1323.8 | 1064.8 |
| 102.5° | 111.5  | 171.9  | 834.9  | 1553.6 | 1399.2 |
| 105°   | 135.9  | 196.8  | 761.7  | 1640.2 | 1633.8 |
| 107.5° | 162.6  | 222.4  | 714.1  | 1614.0 | 1745.2 |
| 110°   | 189.3  | 247.9  | 692.1  | 1521.2 | 1747.6 |

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**CANDELA DISTRIBUTION (continued):**

|        | 0°    | 22.5° | 45°   | 67.5°  | 90°    |
|--------|-------|-------|-------|--------|--------|
| 112.5° | 214.8 | 273.5 | 681.6 | 1407.4 | 1679.1 |
| 115°   | 239.2 | 300.2 | 679.3 | 1305.2 | 1568.7 |
| 117.5° | 264.7 | 325.2 | 678.1 | 1225.0 | 1460.8 |
| 120°   | 290.3 | 349.6 | 678.1 | 1171.0 | 1372.5 |
| 122.5° | 313.5 | 373.3 | 677.0 | 1135.6 | 1302.8 |
| 125°   | 333.3 | 396.0 | 675.8 | 1110.6 | 1251.7 |
| 127.5° | 351.8 | 416.8 | 673.5 | 1086.8 | 1219.2 |
| 130°   | 366.9 | 437.2 | 672.3 | 1058.4 | 1191.4 |
| 132.5° | 382.0 | 454.6 | 671.2 | 1024.8 | 1160.0 |
| 135°   | 396.0 | 471.4 | 670.0 | 985.8  | 1119.4 |
| 137.5° | 409.9 | 486.0 | 670.0 | 944.0  | 1071.8 |
| 140°   | 425.0 | 499.3 | 668.8 | 903.4  | 1019.5 |
| 142.5° | 441.2 | 511.5 | 668.8 | 865.6  | 963.8  |
| 145°   | 456.3 | 522.6 | 666.5 | 831.4  | 913.8  |
| 147.5° | 473.8 | 533.0 | 663.0 | 803.0  | 867.4  |
| 150°   | 490.0 | 542.8 | 659.5 | 776.8  | 829.1  |
| 152.5° | 505.1 | 552.2 | 653.7 | 754.8  | 794.2  |
| 155°   | 519.0 | 560.3 | 647.9 | 733.8  | 765.2  |
| 157.5° | 533.0 | 567.8 | 642.1 | 714.1  | 738.5  |
| 160°   | 545.8 | 574.2 | 635.2 | 694.4  | 714.1  |
| 162.5° | 557.4 | 579.4 | 628.2 | 675.2  | 690.9  |
| 165°   | 565.5 | 582.9 | 621.2 | 657.8  | 667.7  |
| 167.5° | 574.8 | 585.8 | 614.3 | 642.8  | 649.1  |
| 170°   | 580.6 | 588.2 | 607.3 | 627.6  | 631.7  |
| 172.5° | 586.4 | 589.8 | 600.3 | 614.2  | 614.3  |
| 175°   | 589.9 | 591.0 | 595.7 | 603.8  | 601.5  |
| 177.5° | 592.2 | 591.0 | 592.2 | 596.2  | 592.2  |
| 180°   | 591.0 | 591.0 | 591.0 | 591.0  | 591.0  |

(END OF REPORT)