

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: P1026162

Luminaire Tested: S124RDIP-B1195D365UB40-4F0-XX-W2A-F4

Issue Date: 5/6/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1026162  
REPORT IS A COMBINATION OF REPORTS P999132 AND P1007351  
Test Lab: INNOVATION CENTER  
Issue Date: 5/6/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S124RDIP-B1195D365UB40-4F0-XX-W2A-F4  
Description: Define 4 Regressed Direct/Indirect Pendant with 4000K BioUP LEDs {m-DER=0.865}  
{m-EER=0.951}  
Light Source: -  
Ballast/Driver: -

**Summary**

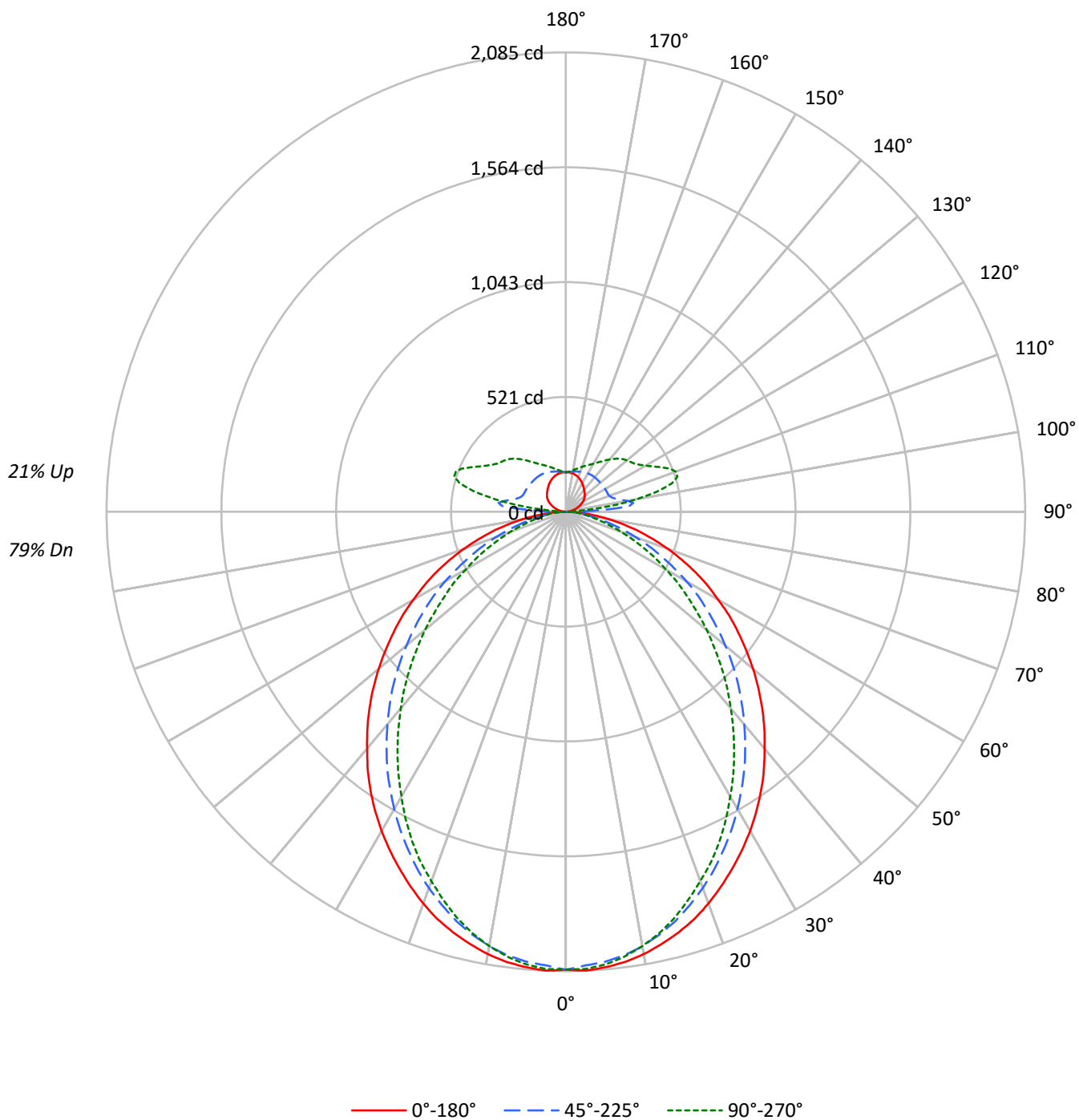
Lumens per Lamp: N/A  
Luminaire Lumens: 6115.6 lumens  
Efficiency: N/A  
Efficacy: 86.6 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.09 / 1.24  
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')  
CIE Type: Semi-Direct

Input Watts (W): 70.6  
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

TEST NUMBER: P1026162

CATALOG NUMBER: S124RDIP-B1195D365UB40-4F0-XX-W2A-F4

### Luminous Intensity Polar Plot



TEST NUMBER: P1026162

CATALOG NUMBER: S124RDIP-B1195D365UB40-4F0-XX-W2A-F4

**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   | 114 | 114 | 114 | 114 | 109 | 109 | 109 | 109 | 99 | 99 | 99 | 90 | 90 | 90 | 82 | 82 | 82 |
| 1   | 105 | 100 | 96  | 93  | 100 | 96  | 93  | 89  | 88 | 85 | 83 | 80 | 78 | 76 | 74 | 72 | 70 |
| 2   | 96  | 88  | 82  | 77  | 91  | 84  | 79  | 74  | 78 | 73 | 69 | 71 | 68 | 64 | 65 | 62 | 60 |
| 3   | 88  | 78  | 70  | 64  | 83  | 75  | 68  | 62  | 69 | 63 | 59 | 63 | 59 | 55 | 58 | 55 | 52 |
| 4   | 80  | 69  | 61  | 55  | 77  | 67  | 59  | 53  | 61 | 55 | 50 | 57 | 52 | 48 | 52 | 48 | 45 |
| 5   | 74  | 62  | 54  | 48  | 71  | 60  | 52  | 46  | 55 | 49 | 44 | 51 | 46 | 42 | 47 | 43 | 39 |
| 6   | 68  | 56  | 48  | 42  | 65  | 54  | 46  | 41  | 50 | 44 | 39 | 46 | 41 | 37 | 43 | 38 | 35 |
| 7   | 64  | 51  | 43  | 37  | 61  | 49  | 41  | 36  | 46 | 39 | 34 | 42 | 37 | 33 | 39 | 35 | 31 |
| 8   | 59  | 46  | 38  | 33  | 56  | 45  | 37  | 32  | 42 | 35 | 31 | 39 | 33 | 29 | 36 | 32 | 28 |
| 9   | 55  | 43  | 35  | 30  | 53  | 41  | 34  | 29  | 39 | 32 | 28 | 36 | 31 | 27 | 34 | 29 | 25 |
| 10  | 52  | 39  | 32  | 27  | 50  | 38  | 31  | 26  | 36 | 30 | 25 | 33 | 28 | 24 | 31 | 27 | 23 |

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

|     | 0°    | 45°   | 90°   |
|-----|-------|-------|-------|
| 0°  | 16947 | 16947 | 16947 |
| 5°  | 16949 | 16444 | 16445 |
| 10° | 16805 | 15925 | 15736 |
| 15° | 16574 | 15279 | 14898 |
| 20° | 16271 | 14542 | 13943 |
| 25° | 15893 | 13747 | 13009 |
| 30° | 15524 | 12937 | 11962 |
| 35° | 15117 | 12115 | 10938 |
| 40° | 14633 | 11230 | 9886  |
| 45° | 14180 | 10353 | 8844  |
| 50° | 13663 | 9394  | 7786  |
| 55° | 13106 | 8412  | 6695  |
| 60° | 12487 | 7368  | 5616  |
| 65° | 11891 | 6172  | 4579  |
| 70° | 11041 | 4913  | 3498  |
| 75° | 9951  | 3573  | 2447  |
| 80° | 8312  | 2194  | 1758  |
| 85° | 6251  | 1263  | 966   |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 14180 cd/sqm

TEST NUMBER: P1026162

CATALOG NUMBER: S124RDIP-B1195D365UB40-4F0-XX-W2A-F4

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 195.4  | 3.2       |
| 10°-20°   | 544.9  | 8.9       |
| 20°-30°   | 786.7  | 12.9      |
| 30°-40°   | 891.6  | 14.6      |
| 40°-50°   | 860.8  | 14.1      |
| 50°-60°   | 715.7  | 11.7      |
| 60°-70°   | 494.0  | 8.1       |
| 70°-80°   | 249.6  | 4.1       |
| 80°-90°   | 64.1   | 1.0       |
| 90°-100°  | 133.6  | 2.2       |
| 100°-110° | 271.8  | 4.4       |
| 110°-120° | 242.3  | 4.0       |
| 120°-130° | 203.5  | 3.3       |
| 130°-140° | 169.8  | 2.8       |
| 140°-150° | 129.7  | 2.1       |
| 150°-160° | 91.2   | 1.5       |
| 160°-170° | 53.6   | 0.9       |
| 170°-180° | 17.4   | 0.3       |
| 0°-30°    | 1527.0 | 25.0      |
| 0°-40°    | 2418.5 | 39.5      |
| 0°-60°    | 3995.0 | 65.3      |
| 0°-90°    | 4802.7 | 78.5      |
| 90°-120°  | 647.7  | 10.6      |
| 90°-150°  | 1150.7 | 18.8      |
| 90°-180°  | 1313.0 | 21.5      |
| 0°-180°   | 6115.6 | 100.0     |

**CANDELA DISTRIBUTION:**

|      | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|------|------|-------|------|-------|------|------|
| 0°   | 2078 | 2078  | 2078 | 2078  | 2078 |      |
| 5°   | 2075 | 2069  | 2050 | 2066  | 2062 | 197  |
| 15°  | 1976 | 1962  | 1922 | 1919  | 1908 | 557  |
| 25°  | 1787 | 1758  | 1693 | 1666  | 1650 | 823  |
| 35°  | 1545 | 1494  | 1415 | 1361  | 1332 | 966  |
| 45°  | 1260 | 1201  | 1106 | 1028  | 999  | 972  |
| 55°  | 955  | 891   | 788  | 705   | 675  | 854  |
| 65°  | 649  | 581   | 479  | 411   | 392  | 641  |
| 75°  | 345  | 286   | 212  | 175   | 166  | 364  |
| 85°  | 86   | 54    | 49   | 46    | 46   | 94   |
| 90°  | 0    | 3     | 6    | 7     | 7    | 6    |
| 95°  | 12   | 37    | 288  | 143   | 86   | 13   |
| 105° | 41   | 60    | 232  | 499   | 497  | 44   |
| 115° | 73   | 91    | 207  | 397   | 478  | 72   |
| 125° | 101  | 121   | 206  | 338   | 381  | 90   |
| 135° | 120  | 144   | 204  | 300   | 341  | 93   |
| 145° | 139  | 159   | 203  | 253   | 278  | 87   |
| 155° | 158  | 171   | 197  | 223   | 233  | 73   |
| 165° | 172  | 177   | 189  | 200   | 203  | 49   |
| 175° | 180  | 180   | 181  | 184   | 183  | 17   |
| 180° | 180  | 180   | 180  | 180   | 180  |      |

TEST NUMBER: P1026162

CATALOG NUMBER: S124RDIP-B1195D365UB40-4F0-XX-W2A-F4

**CANDELA DISTRIBUTION (FULL):**

|        | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|--------|--------|--------|--------|--------|--------|
| 0°     | 2078.2 | 2078.2 | 2078.2 | 2078.2 | 2078.2 |
| 2.5°   | 2084.6 | 2078.2 | 2060.7 | 2078.2 | 2076.7 |
| 5°     | 2075.1 | 2068.7 | 2049.6 | 2065.5 | 2062.3 |
| 7.5°   | 2060.7 | 2054.4 | 2030.5 | 2041.6 | 2036.9 |
| 10°    | 2038.5 | 2030.5 | 2001.9 | 2008.2 | 2001.9 |
| 12.5°  | 2009.8 | 2000.3 | 1965.3 | 1968.4 | 1958.9 |
| 15°    | 1976.4 | 1962.1 | 1922.3 | 1919.1 | 1908.0 |
| 17.5°  | 1938.2 | 1917.5 | 1871.4 | 1863.4 | 1847.5 |
| 20°    | 1892.1 | 1871.4 | 1817.3 | 1804.5 | 1783.9 |
| 22.5°  | 1841.1 | 1817.3 | 1758.4 | 1737.7 | 1721.8 |
| 25°    | 1787.0 | 1758.4 | 1693.1 | 1666.1 | 1650.2 |
| 27.5°  | 1731.3 | 1696.3 | 1627.9 | 1596.1 | 1573.8 |
| 30°    | 1672.5 | 1632.7 | 1557.9 | 1518.1 | 1492.6 |
| 32.5°  | 1610.4 | 1564.3 | 1486.3 | 1438.5 | 1414.7 |
| 35°    | 1545.2 | 1494.2 | 1414.7 | 1360.6 | 1331.9 |
| 37.5°  | 1476.7 | 1424.2 | 1336.7 | 1277.8 | 1249.2 |
| 40°    | 1403.5 | 1351.0 | 1260.3 | 1193.5 | 1164.8 |
| 42.5°  | 1333.5 | 1277.8 | 1182.3 | 1113.9 | 1083.7 |
| 45°    | 1260.3 | 1201.4 | 1106.0 | 1028.0 | 999.3  |
| 47.5°  | 1185.5 | 1125.1 | 1026.4 | 945.2  | 913.4  |
| 50°    | 1109.1 | 1047.1 | 945.2  | 865.7  | 835.4  |
| 52.5°  | 1031.2 | 970.7  | 865.7  | 784.5  | 752.7  |
| 55°    | 954.8  | 891.1  | 787.7  | 704.9  | 674.7  |
| 57.5°  | 880.0  | 813.2  | 711.3  | 627.0  | 604.7  |
| 60°    | 798.8  | 735.2  | 633.3  | 550.6  | 525.1  |
| 62.5°  | 725.6  | 658.8  | 553.8  | 479.0  | 459.9  |
| 65°    | 649.3  | 580.8  | 479.0  | 410.6  | 391.5  |
| 67.5°  | 569.7  | 504.4  | 409.0  | 348.5  | 326.2  |
| 70°    | 494.9  | 428.1  | 337.4  | 284.8  | 268.9  |
| 72.5°  | 415.3  | 356.5  | 272.1  | 229.1  | 214.8  |
| 75°    | 345.3  | 286.4  | 211.6  | 175.0  | 165.5  |
| 77.5°  | 272.1  | 221.2  | 157.5  | 132.1  | 128.9  |
| 80°    | 202.1  | 155.9  | 108.2  | 103.4  | 101.8  |
| 82.5°  | 141.6  | 100.3  | 78.0   | 74.8   | 73.2   |
| 85°    | 85.9   | 54.1   | 49.3   | 46.1   | 46.1   |
| 87.5°  | 36.6   | 23.9   | 22.3   | 20.7   | 22.3   |
| 90°    | 0.4    | 2.8    | 6.4    | 7.1    | 7.4    |
| 92.5°  | 4.9    | 27.2   | 138.6  | 45.8   | 32.2   |
| 95°    | 11.7   | 36.8   | 288.1  | 142.6  | 86.2   |
| 97.5°  | 19.4   | 40.6   | 308.2  | 291.2  | 207.1  |
| 100°   | 26.9   | 46.0   | 284.2  | 403.0  | 324.1  |
| 102.5° | 33.9   | 52.3   | 254.1  | 472.9  | 425.9  |
| 105°   | 41.4   | 59.9   | 231.9  | 499.2  | 497.3  |
| 107.5° | 49.5   | 67.7   | 217.4  | 491.2  | 531.2  |
| 110°   | 57.6   | 75.4   | 210.7  | 463.0  | 531.9  |

TEST NUMBER: P1026162

CATALOG NUMBER: S124RDIP-B1195D365UB40-4F0-XX-W2A-F4

**CANDELA DISTRIBUTION (continued):**

|        | 0°    | 22.5° | 45°   | 67.5° | 90°   |
|--------|-------|-------|-------|-------|-------|
| 112.5° | 65.4  | 83.2  | 207.5 | 428.4 | 511.1 |
| 115°   | 72.8  | 91.4  | 206.8 | 397.2 | 477.5 |
| 117.5° | 80.6  | 99.0  | 206.4 | 372.8 | 444.6 |
| 120°   | 88.4  | 106.4 | 206.4 | 356.4 | 417.8 |
| 122.5° | 95.4  | 113.6 | 206.1 | 345.7 | 396.6 |
| 125°   | 101.4 | 120.6 | 205.7 | 338.1 | 381.0 |
| 127.5° | 107.1 | 126.8 | 205.0 | 330.8 | 371.1 |
| 130°   | 111.7 | 133.0 | 204.6 | 322.2 | 362.6 |
| 132.5° | 116.3 | 138.4 | 204.3 | 312.0 | 353.1 |
| 135°   | 120.5 | 143.5 | 203.9 | 300.0 | 340.7 |
| 137.5° | 124.8 | 147.9 | 203.9 | 287.4 | 326.2 |
| 140°   | 129.4 | 152.0 | 203.6 | 275.0 | 310.3 |
| 142.5° | 134.3 | 155.7 | 203.6 | 263.5 | 293.4 |
| 145°   | 138.9 | 159.0 | 202.9 | 253.0 | 278.2 |
| 147.5° | 144.2 | 162.2 | 201.8 | 244.4 | 264.0 |
| 150°   | 149.2 | 165.2 | 200.8 | 236.4 | 252.4 |
| 152.5° | 153.7 | 168.1 | 199.0 | 229.8 | 241.8 |
| 155°   | 158.0 | 170.6 | 197.2 | 223.4 | 232.9 |
| 157.5° | 162.2 | 172.8 | 195.5 | 217.4 | 224.8 |
| 160°   | 166.1 | 174.8 | 193.3 | 211.4 | 217.4 |
| 162.5° | 169.7 | 176.4 | 191.2 | 205.6 | 210.3 |
| 165°   | 172.1 | 177.4 | 189.1 | 200.2 | 203.2 |
| 167.5° | 175.0 | 178.3 | 187.0 | 195.6 | 197.6 |
| 170°   | 176.7 | 179.0 | 184.9 | 191.0 | 192.3 |
| 172.5° | 178.5 | 179.6 | 182.7 | 187.0 | 187.0 |
| 175°   | 179.6 | 179.9 | 181.3 | 183.8 | 183.1 |
| 177.5° | 180.3 | 179.9 | 180.3 | 181.5 | 180.3 |
| 180°   | 179.9 | 179.9 | 179.9 | 179.9 | 179.9 |

(END OF REPORT)