

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: P1010118

Luminaire Tested: S122RDIP-B675D1080UB40-4F0-XX-W2A-F1

Issue Date: 5/6/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1010118  
REPORT IS A COMBINATION OF REPORTS P988450 AND P1007351  
Test Lab: INNOVATION CENTER  
Issue Date: 5/6/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S122RDIP-B675D1080UB40-4F0-XX-W2A-F1  
Description: Define 2 Regressed Direct/Indirect Pendant with 4000K BioUP LEDs {m-DER=0.865}  
{m-EER=0.951}  
Light Source: -  
Ballast/Driver: -

**Summary**

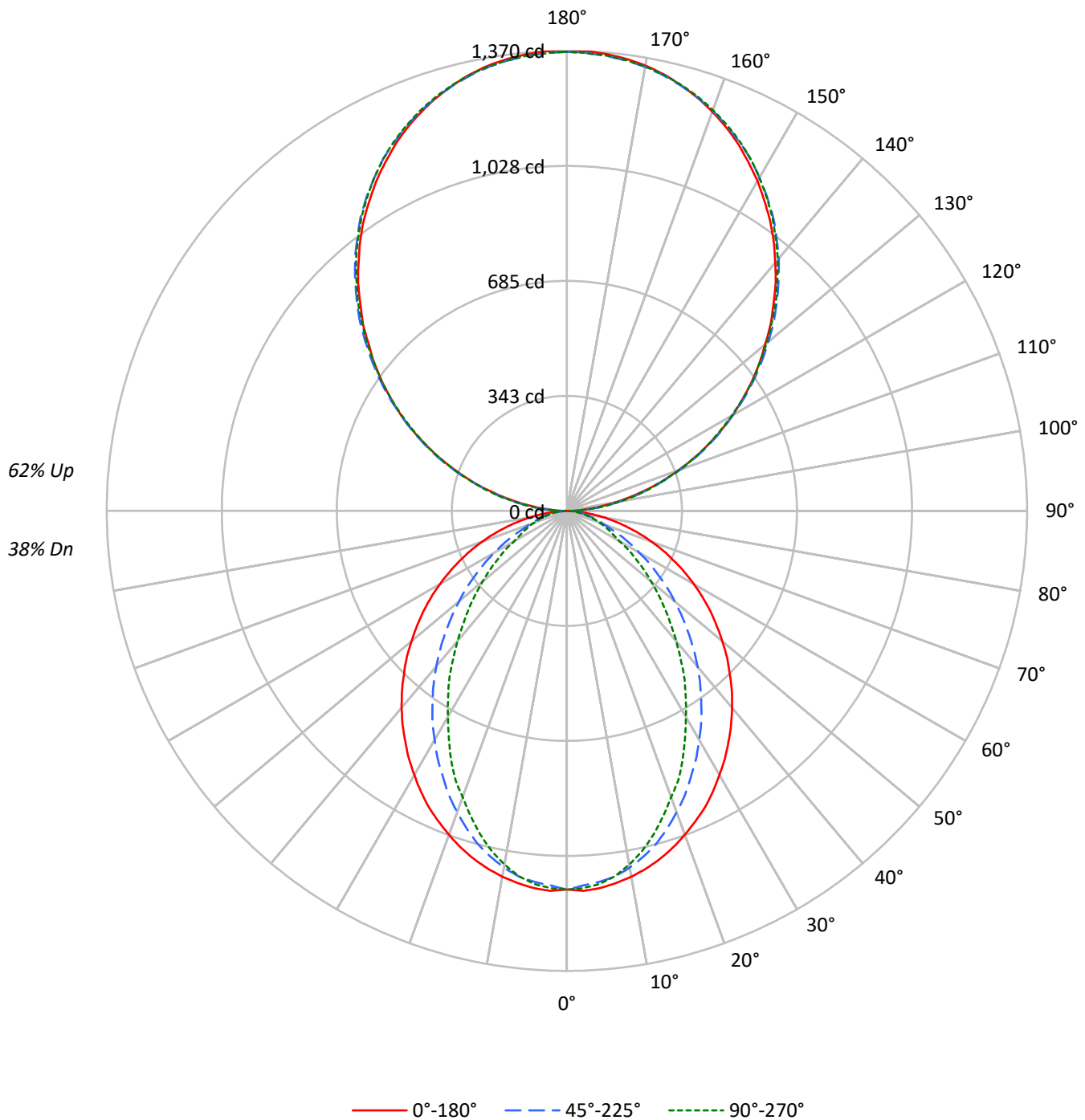
Lumens per Lamp: N/A  
Luminaire Lumens: 6147.0 lumens  
Efficiency: N/A  
Efficacy: 86.7 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 0.99 / 1.16  
Luminous Opening: Rectangular w/ Sides (W: 0.17' x L: 4' x H: 0.1')  
CIE Type: Semi-Indirect

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   | 104 | 104 | 104 | 104 | 95 | 95 | 95 | 95 | 77 | 77 | 77 | 60 | 60 | 60 | 45 | 45 | 45 |
| 1   | 95  | 91  | 88  | 84  | 86 | 83 | 80 | 77 | 68 | 65 | 63 | 53 | 52 | 51 | 40 | 39 | 39 |
| 2   | 87  | 80  | 74  | 69  | 79 | 73 | 68 | 64 | 60 | 56 | 53 | 47 | 45 | 43 | 36 | 34 | 33 |
| 3   | 80  | 71  | 64  | 58  | 72 | 65 | 59 | 54 | 53 | 49 | 45 | 42 | 39 | 37 | 32 | 30 | 29 |
| 4   | 73  | 63  | 55  | 49  | 66 | 57 | 51 | 46 | 47 | 42 | 39 | 38 | 34 | 32 | 29 | 27 | 25 |
| 5   | 67  | 56  | 48  | 43  | 61 | 51 | 45 | 39 | 42 | 37 | 33 | 34 | 30 | 28 | 26 | 24 | 22 |
| 6   | 62  | 50  | 43  | 37  | 56 | 46 | 39 | 34 | 38 | 33 | 29 | 31 | 27 | 24 | 24 | 21 | 19 |
| 7   | 57  | 45  | 38  | 32  | 52 | 42 | 35 | 30 | 35 | 30 | 26 | 28 | 24 | 22 | 22 | 19 | 17 |
| 8   | 53  | 41  | 34  | 29  | 48 | 38 | 31 | 27 | 32 | 27 | 23 | 26 | 22 | 19 | 20 | 18 | 16 |
| 9   | 49  | 38  | 30  | 26  | 45 | 35 | 28 | 24 | 29 | 24 | 21 | 24 | 20 | 17 | 19 | 16 | 14 |
| 10  | 46  | 35  | 28  | 23  | 42 | 32 | 26 | 22 | 27 | 22 | 19 | 22 | 18 | 16 | 17 | 15 | 13 |

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

|     | 0°    | 45°   | 90°   |
|-----|-------|-------|-------|
| 0°  | 17849 | 17849 | 17849 |
| 5°  | 17878 | 16981 | 16854 |
| 10° | 17701 | 16105 | 15574 |
| 15° | 17459 | 15072 | 14114 |
| 20° | 17137 | 13896 | 12587 |
| 25° | 16807 | 12690 | 11188 |
| 30° | 16364 | 11516 | 9663  |
| 35° | 15930 | 10332 | 8352  |
| 40° | 15489 | 9168  | 7002  |
| 45° | 14976 | 7967  | 5825  |
| 50° | 14446 | 6809  | 4743  |
| 55° | 13893 | 5651  | 3764  |
| 60° | 13251 | 4520  | 2848  |
| 65° | 12513 | 3447  | 2315  |
| 70° | 11624 | 2501  | 1842  |
| 75° | 10506 | 1906  | 1407  |
| 80° | 8878  | 1291  | 944   |
| 85° | 6201  | 592   | 456   |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 14976 cd/sqm

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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 105.7  | 1.7       |
| 10°-20°   | 290.1  | 4.7       |
| 20°-30°   | 407.3  | 6.6       |
| 30°-40°   | 444.0  | 7.2       |
| 40°-50°   | 408.1  | 6.6       |
| 50°-60°   | 320.5  | 5.2       |
| 60°-70°   | 208.6  | 3.4       |
| 70°-80°   | 107.4  | 1.7       |
| 80°-90°   | 31.3   | 0.5       |
| 90°-100°  | 84.6   | 1.4       |
| 100°-110° | 269.0  | 4.4       |
| 110°-120° | 460.3  | 7.5       |
| 120°-130° | 605.3  | 9.8       |
| 130°-140° | 679.5  | 11.1      |
| 140°-150° | 666.3  | 10.8      |
| 150°-160° | 558.9  | 9.1       |
| 160°-170° | 370.7  | 6.0       |
| 170°-180° | 129.6  | 2.1       |
| 0°-30°    | 803.1  | 13.1      |
| 0°-40°    | 1247.1 | 20.3      |
| 0°-60°    | 1975.6 | 32.1      |
| 0°-90°    | 2322.9 | 37.8      |
| 90°-120°  | 813.9  | 13.2      |
| 90°-150°  | 2764.9 | 45.0      |
| 90°-180°  | 3824.0 | 62.2      |
| 0°-180°   | 6147.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|      | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|------|------|-------|------|-------|------|------|
| 0°   | 1128 | 1128  | 1128 | 1128  | 1128 |      |
| 5°   | 1128 | 1122  | 1109 | 1118  | 1115 | 107  |
| 15°  | 1072 | 1061  | 1027 | 1007  | 997  | 302  |
| 25°  | 974  | 941   | 874  | 832   | 816  | 448  |
| 35°  | 839  | 787   | 697  | 633   | 610  | 525  |
| 45°  | 686  | 617   | 510  | 438   | 413  | 530  |
| 55°  | 521  | 442   | 332  | 270   | 251  | 466  |
| 65°  | 352  | 269   | 178  | 143   | 140  | 349  |
| 75°  | 188  | 116   | 82   | 74    | 74   | 199  |
| 85°  | 44   | 22    | 19   | 19    | 19   | 50   |
| 90°  | 1    | 15    | 40   | 38    | 39   | 6    |
| 95°  | 60   | 72    | 74   | 74    | 72   | 67   |
| 105° | 248  | 252   | 254  | 256   | 256  | 262  |
| 115° | 462  | 469   | 466  | 465   | 462  | 457  |
| 125° | 672  | 682   | 679  | 675   | 674  | 600  |
| 135° | 869  | 882   | 884  | 883   | 880  | 672  |
| 145° | 1055 | 1063  | 1070 | 1071  | 1066 | 659  |
| 155° | 1206 | 1210  | 1213 | 1219  | 1215 | 555  |
| 165° | 1312 | 1311  | 1311 | 1319  | 1314 | 370  |
| 175° | 1366 | 1362  | 1360 | 1368  | 1361 | 130  |
| 180° | 1368 | 1368  | 1368 | 1368  | 1368 |      |

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**CANDELA DISTRIBUTION (FULL):**

|        | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|--------|--------|--------|--------|--------|--------|
| 0°     | 1127.6 | 1127.6 | 1127.6 | 1127.6 | 1127.6 |
| 2.5°   | 1132.7 | 1127.6 | 1116.3 | 1126.6 | 1124.5 |
| 5°     | 1127.6 | 1122.5 | 1109.2 | 1118.4 | 1115.3 |
| 7.5°   | 1118.4 | 1112.3 | 1098.0 | 1102.1 | 1097.0 |
| 10°    | 1106.1 | 1099.0 | 1078.6 | 1075.5 | 1069.4 |
| 12.5°  | 1090.8 | 1081.7 | 1054.1 | 1048.0 | 1036.8 |
| 15°    | 1072.5 | 1061.2 | 1026.6 | 1007.2 | 997.0  |
| 17.5°  | 1051.0 | 1034.7 | 991.9  | 969.4  | 953.1  |
| 20°    | 1026.6 | 1006.1 | 955.1  | 929.6  | 907.2  |
| 22.5°  | 1000.0 | 976.6  | 917.4  | 882.7  | 867.4  |
| 25°    | 973.5  | 940.8  | 873.5  | 831.6  | 816.3  |
| 27.5°  | 941.9  | 907.2  | 832.7  | 784.7  | 761.2  |
| 30°    | 908.2  | 869.4  | 787.8  | 735.7  | 708.2  |
| 32.5°  | 875.5  | 828.6  | 744.9  | 683.7  | 658.2  |
| 35°    | 838.8  | 786.8  | 697.0  | 632.7  | 610.2  |
| 37.5°  | 803.1  | 747.0  | 652.1  | 581.6  | 556.1  |
| 40°    | 765.3  | 704.1  | 605.1  | 532.7  | 506.1  |
| 42.5°  | 726.5  | 661.2  | 558.2  | 482.7  | 457.2  |
| 45°    | 685.7  | 617.4  | 510.2  | 437.8  | 413.3  |
| 47.5°  | 647.0  | 574.5  | 464.3  | 391.8  | 369.4  |
| 50°    | 604.1  | 531.6  | 419.4  | 349.0  | 327.6  |
| 52.5°  | 562.3  | 485.7  | 376.5  | 309.2  | 289.8  |
| 55°    | 521.4  | 441.8  | 331.6  | 270.4  | 251.0  |
| 57.5°  | 479.6  | 398.0  | 291.8  | 234.7  | 218.4  |
| 60°    | 436.7  | 355.1  | 250.0  | 198.0  | 181.6  |
| 62.5°  | 394.9  | 313.3  | 214.3  | 165.3  | 157.1  |
| 65°    | 352.0  | 269.4  | 177.6  | 142.9  | 139.8  |
| 67.5°  | 311.2  | 228.6  | 142.9  | 125.5  | 122.5  |
| 70°    | 268.4  | 188.8  | 118.4  | 108.2  | 104.1  |
| 72.5°  | 227.6  | 152.0  | 99.0   | 90.8   | 88.8   |
| 75°    | 187.8  | 116.3  | 81.6   | 74.5   | 73.5   |
| 77.5°  | 148.0  | 82.7   | 64.3   | 60.2   | 58.2   |
| 80°    | 111.2  | 59.2   | 49.0   | 44.9   | 44.9   |
| 82.5°  | 77.6   | 39.8   | 33.7   | 31.6   | 31.6   |
| 85°    | 43.9   | 22.4   | 19.4   | 19.4   | 19.4   |
| 87.5°  | 16.3   | 8.2    | 8.2    | 7.1    | 7.1    |
| 90°    | 1.2    | 15.0   | 40.4   | 38.1   | 39.2   |
| 92.5°  | 25.4   | 34.6   | 35.8   | 36.9   | 36.9   |
| 95°    | 60.0   | 71.6   | 73.9   | 73.9   | 71.6   |
| 97.5°  | 100.4  | 110.8  | 115.4  | 115.4  | 115.4  |
| 100°   | 146.6  | 155.8  | 159.3  | 159.3  | 158.1  |
| 102.5° | 195.1  | 202.0  | 206.6  | 207.8  | 206.6  |
| 105°   | 248.2  | 251.6  | 253.9  | 256.2  | 256.2  |
| 107.5° | 301.3  | 305.9  | 305.9  | 307.0  | 301.3  |
| 110°   | 352.0  | 359.0  | 359.0  | 359.0  | 355.5  |

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**CANDELA DISTRIBUTION (continued):**

|        | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|--------|--------|--------|--------|--------|--------|
| 112.5° | 407.5  | 414.4  | 413.2  | 409.8  | 407.5  |
| 115°   | 461.7  | 468.6  | 466.3  | 465.2  | 461.7  |
| 117.5° | 516.0  | 525.2  | 519.4  | 516.0  | 512.5  |
| 120°   | 570.2  | 579.4  | 570.2  | 570.2  | 566.7  |
| 122.5° | 619.8  | 631.4  | 625.6  | 622.1  | 619.8  |
| 125°   | 671.8  | 682.2  | 678.7  | 675.2  | 674.1  |
| 127.5° | 722.6  | 735.3  | 730.6  | 726.0  | 722.6  |
| 130°   | 769.9  | 784.9  | 782.6  | 780.3  | 775.7  |
| 132.5° | 823.0  | 834.5  | 835.7  | 829.9  | 826.5  |
| 135°   | 869.2  | 881.9  | 884.2  | 883.0  | 879.5  |
| 137.5° | 919.9  | 930.3  | 932.6  | 931.5  | 926.9  |
| 140°   | 965.0  | 975.4  | 981.1  | 981.1  | 976.5  |
| 142.5° | 1011.1 | 1021.5 | 1025.0 | 1026.1 | 1021.5 |
| 145°   | 1055.0 | 1063.1 | 1070.0 | 1071.2 | 1066.5 |
| 147.5° | 1094.2 | 1104.6 | 1109.2 | 1111.6 | 1106.9 |
| 150°   | 1134.6 | 1141.6 | 1146.2 | 1149.6 | 1146.2 |
| 152.5° | 1170.4 | 1177.3 | 1183.1 | 1187.7 | 1183.1 |
| 155°   | 1206.2 | 1209.7 | 1213.1 | 1218.9 | 1215.4 |
| 157.5° | 1237.4 | 1239.7 | 1242.0 | 1250.1 | 1244.3 |
| 160°   | 1265.1 | 1267.4 | 1268.5 | 1275.5 | 1270.8 |
| 162.5° | 1290.5 | 1290.5 | 1291.6 | 1299.7 | 1293.9 |
| 165°   | 1312.4 | 1311.2 | 1311.2 | 1319.3 | 1313.5 |
| 167.5° | 1332.0 | 1328.6 | 1328.6 | 1336.6 | 1330.9 |
| 170°   | 1347.0 | 1343.6 | 1342.4 | 1350.5 | 1343.6 |
| 172.5° | 1357.4 | 1353.9 | 1352.8 | 1360.9 | 1353.9 |
| 175°   | 1365.5 | 1362.0 | 1359.7 | 1367.8 | 1360.9 |
| 177.5° | 1370.1 | 1366.6 | 1364.3 | 1371.3 | 1364.3 |
| 180°   | 1367.8 | 1367.8 | 1367.8 | 1367.8 | 1367.8 |

(END OF REPORT)