

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: P1010123

Luminaire Tested: S122RDIP-B675D1080UB50-4F0-XX-W2A-F

Issue Date: 5/6/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1010123  
REPORT IS A COMBINATION OF REPORTS P988455 AND P1007351  
Test Lab: INNOVATION CENTER  
Issue Date: 5/6/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S122RDIP-B675D1080UB50-4F0-XX-W2A-F  
Description: Define 2 Regressed Direct/Indirect Pendant with 5000K BioUP LEDs {m-DER=1.015}  
{m-EER=1.115}  
Light Source: -  
Ballast/Driver: -

**Summary**

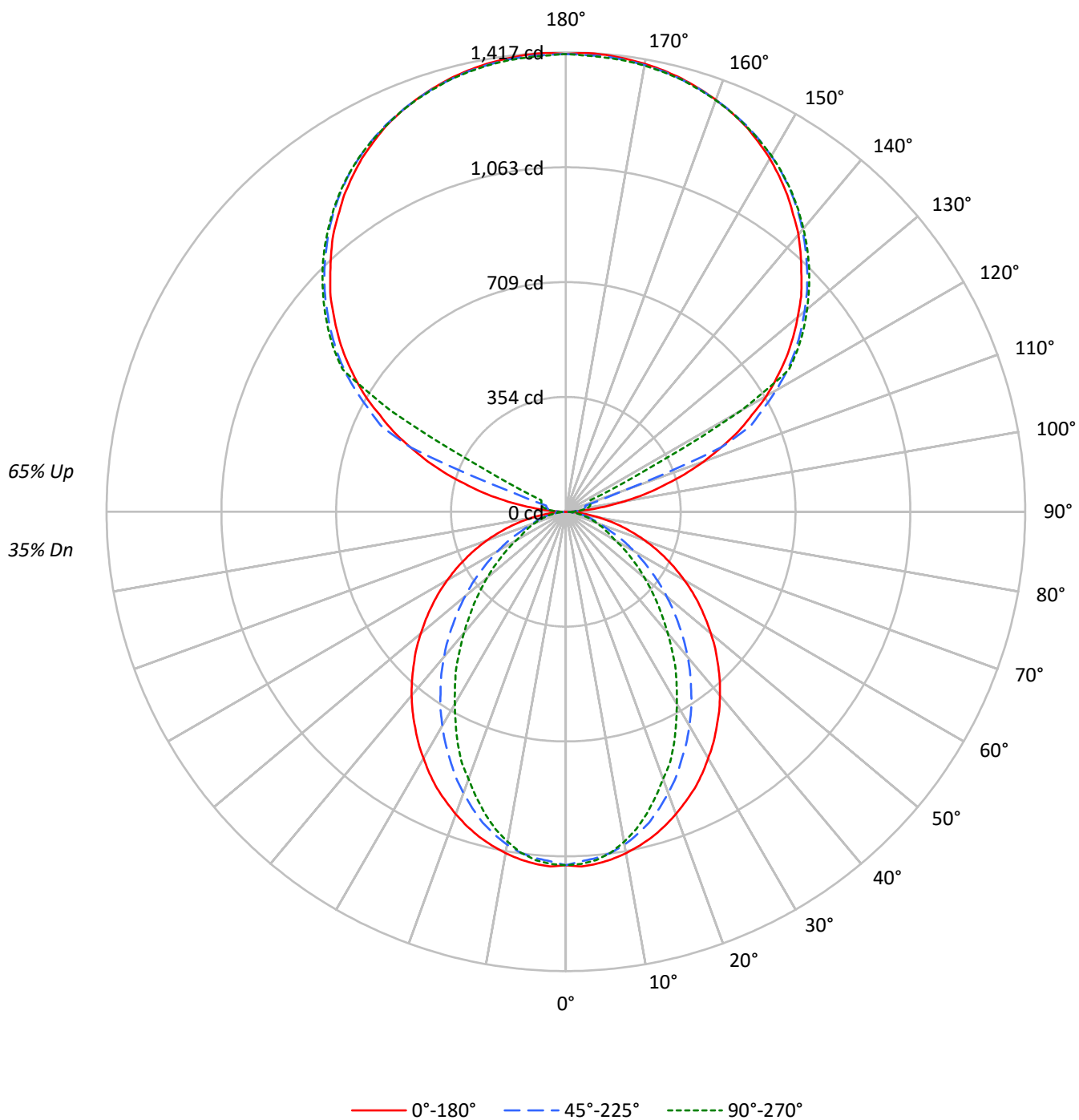
Lumens per Lamp: N/A  
Luminaire Lumens: 6383.0 lumens  
Efficiency: N/A  
Efficacy: 90.0 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 0.99 / 1.16  
Luminous Opening: Rectangular w/ Sides (W: 0.17' x L: 4' x H: 0.1')  
CIE Type: Semi-Indirect

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 | 94 | 94 | 94 | 94 | 75 | 75 | 75 | 58 | 58 | 58 | 42 | 42 | 42 |
| 1   | 95  | 91  | 87  | 84  | 86 | 82 | 79 | 76 | 66 | 64 | 62 | 52 | 50 | 49 | 38 | 37 | 36 |
| 2   | 87  | 80  | 74  | 69  | 78 | 72 | 67 | 63 | 58 | 55 | 52 | 46 | 43 | 41 | 34 | 32 | 31 |
| 3   | 79  | 70  | 63  | 58  | 71 | 64 | 58 | 53 | 52 | 48 | 44 | 41 | 38 | 35 | 30 | 29 | 27 |
| 4   | 73  | 62  | 55  | 49  | 65 | 57 | 50 | 45 | 46 | 41 | 38 | 36 | 33 | 31 | 27 | 25 | 24 |
| 5   | 67  | 56  | 48  | 42  | 60 | 51 | 44 | 39 | 41 | 36 | 33 | 33 | 29 | 27 | 25 | 22 | 21 |
| 6   | 61  | 50  | 42  | 37  | 55 | 46 | 39 | 34 | 37 | 32 | 29 | 30 | 26 | 23 | 23 | 20 | 18 |
| 7   | 57  | 45  | 37  | 32  | 51 | 41 | 35 | 30 | 34 | 29 | 25 | 27 | 23 | 21 | 21 | 18 | 16 |
| 8   | 53  | 41  | 33  | 28  | 48 | 37 | 31 | 26 | 31 | 26 | 22 | 25 | 21 | 19 | 19 | 17 | 15 |
| 9   | 49  | 37  | 30  | 25  | 44 | 34 | 28 | 24 | 28 | 24 | 20 | 23 | 19 | 17 | 18 | 15 | 13 |
| 10  | 46  | 34  | 27  | 23  | 41 | 31 | 25 | 21 | 26 | 21 | 18 | 21 | 18 | 15 | 16 | 14 | 12 |

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

|     | 0°    | 45°   | 90°   |
|-----|-------|-------|-------|
| 0°  | 17256 | 17256 | 17256 |
| 5°  | 17284 | 16417 | 16295 |
| 10° | 17114 | 15571 | 15057 |
| 15° | 16879 | 14572 | 13645 |
| 20° | 16568 | 13435 | 12168 |
| 25° | 16249 | 12269 | 10817 |
| 30° | 15820 | 11133 | 9342  |
| 35° | 15400 | 9988  | 8075  |
| 40° | 14975 | 8863  | 6769  |
| 45° | 14480 | 7703  | 5632  |
| 50° | 13965 | 6584  | 4585  |
| 55° | 13432 | 5464  | 3640  |
| 60° | 12811 | 4370  | 2754  |
| 65° | 12101 | 3332  | 2239  |
| 70° | 11238 | 2416  | 1780  |
| 75° | 10153 | 1843  | 1359  |
| 80° | 8583  | 1249  | 912   |
| 85° | 5989  | 570   | 440   |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 14480 cd/sqm

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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 102.2  | 1.6       |
| 10°-20°   | 280.5  | 4.4       |
| 20°-30°   | 393.8  | 6.2       |
| 30°-40°   | 429.2  | 6.7       |
| 40°-50°   | 394.5  | 6.2       |
| 50°-60°   | 309.8  | 4.9       |
| 60°-70°   | 201.7  | 3.2       |
| 70°-80°   | 103.8  | 1.6       |
| 80°-90°   | 29.0   | 0.5       |
| 90°-100°  | 46.6   | 0.7       |
| 100°-110° | 173.5  | 2.7       |
| 110°-120° | 460.2  | 7.2       |
| 120°-130° | 763.3  | 12.0      |
| 130°-140° | 810.8  | 12.7      |
| 140°-150° | 753.6  | 11.8      |
| 150°-160° | 605.8  | 9.5       |
| 160°-170° | 390.4  | 6.1       |
| 170°-180° | 134.4  | 2.1       |
| 0°-30°    | 776.4  | 12.2      |
| 0°-40°    | 1205.7 | 18.9      |
| 0°-60°    | 1910.0 | 29.9      |
| 0°-90°    | 2244.5 | 35.2      |
| 90°-120°  | 680.3  | 10.7      |
| 90°-150°  | 3007.9 | 47.1      |
| 90°-180°  | 4139.0 | 64.8      |
| 0°-180°   | 6383.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|      | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|------|------|-------|------|-------|------|------|
| 0°   | 1090 | 1090  | 1090 | 1090  | 1090 |      |
| 5°   | 1090 | 1085  | 1072 | 1081  | 1078 | 103  |
| 15°  | 1037 | 1026  | 992  | 974   | 964  | 292  |
| 25°  | 941  | 910   | 844  | 804   | 789  | 433  |
| 35°  | 811  | 761   | 674  | 612   | 590  | 508  |
| 45°  | 663  | 597   | 493  | 423   | 400  | 512  |
| 55°  | 504  | 427   | 321  | 261   | 243  | 450  |
| 65°  | 340  | 260   | 172  | 138   | 135  | 337  |
| 75°  | 182  | 112   | 79   | 72    | 71   | 192  |
| 85°  | 42   | 22    | 19   | 19    | 19   | 49   |
| 90°  | 1    | 12    | 20   | 26    | 28   | 6    |
| 95°  | 66   | 33    | 40   | 45    | 44   | 79   |
| 105° | 310  | 341   | 62   | 74    | 78   | 332  |
| 115° | 587  | 605   | 630  | 157   | 84   | 578  |
| 125° | 830  | 844   | 863  | 870   | 873  | 741  |
| 135° | 1028 | 1044  | 1053 | 1063  | 1061 | 794  |
| 145° | 1192 | 1191  | 1208 | 1216  | 1210 | 746  |
| 155° | 1313 | 1303  | 1316 | 1322  | 1314 | 605  |
| 165° | 1383 | 1377  | 1380 | 1387  | 1380 | 391  |
| 175° | 1415 | 1408  | 1410 | 1417  | 1407 | 135  |
| 180° | 1412 | 1412  | 1412 | 1412  | 1412 |      |

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**CANDELA DISTRIBUTION (FULL):**

|        | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|--------|--------|--------|--------|--------|--------|
| 0°     | 1090.1 | 1090.1 | 1090.1 | 1090.1 | 1090.1 |
| 2.5°   | 1095.1 | 1090.1 | 1079.3 | 1089.1 | 1087.2 |
| 5°     | 1090.1 | 1085.2 | 1072.4 | 1081.3 | 1078.3 |
| 7.5°   | 1081.3 | 1075.3 | 1061.5 | 1065.5 | 1060.5 |
| 10°    | 1069.4 | 1062.5 | 1042.8 | 1039.8 | 1033.9 |
| 12.5°  | 1054.6 | 1045.7 | 1019.1 | 1013.2 | 1002.3 |
| 15°    | 1036.9 | 1026.0 | 992.5  | 973.7  | 963.9  |
| 17.5°  | 1016.1 | 1000.4 | 958.9  | 937.2  | 921.4  |
| 20°    | 992.5  | 972.7  | 923.4  | 898.7  | 877.0  |
| 22.5°  | 966.8  | 944.1  | 886.9  | 853.4  | 838.6  |
| 25°    | 941.2  | 909.6  | 844.5  | 804.0  | 789.2  |
| 27.5°  | 910.6  | 877.0  | 805.0  | 758.7  | 736.0  |
| 30°    | 878.0  | 840.5  | 761.6  | 711.3  | 684.7  |
| 32.5°  | 846.5  | 801.1  | 720.2  | 661.0  | 636.3  |
| 35°    | 810.9  | 760.6  | 673.8  | 611.7  | 590.0  |
| 37.5°  | 776.4  | 722.2  | 630.4  | 562.3  | 537.7  |
| 40°    | 739.9  | 680.7  | 585.0  | 515.0  | 489.3  |
| 42.5°  | 702.4  | 639.3  | 539.6  | 466.6  | 442.0  |
| 45°    | 663.0  | 596.9  | 493.3  | 423.2  | 399.6  |
| 47.5°  | 625.5  | 555.4  | 448.9  | 378.8  | 357.1  |
| 50°    | 584.0  | 514.0  | 405.5  | 337.4  | 316.7  |
| 52.5°  | 543.6  | 469.6  | 364.0  | 298.9  | 280.2  |
| 55°    | 504.1  | 427.2  | 320.6  | 261.4  | 242.7  |
| 57.5°  | 463.7  | 384.8  | 282.2  | 226.9  | 211.1  |
| 60°    | 422.2  | 343.3  | 241.7  | 191.4  | 175.6  |
| 62.5°  | 381.8  | 302.9  | 207.2  | 159.8  | 151.9  |
| 65°    | 340.4  | 260.4  | 171.7  | 138.1  | 135.2  |
| 67.5°  | 300.9  | 221.0  | 138.1  | 121.3  | 118.4  |
| 70°    | 259.5  | 182.5  | 114.4  | 104.6  | 100.6  |
| 72.5°  | 220.0  | 147.0  | 95.7   | 87.8   | 85.8   |
| 75°    | 181.5  | 112.5  | 78.9   | 72.0   | 71.0   |
| 77.5°  | 143.0  | 79.9   | 62.2   | 58.2   | 56.2   |
| 80°    | 107.5  | 57.2   | 47.4   | 43.4   | 43.4   |
| 82.5°  | 75.0   | 38.5   | 32.6   | 30.6   | 30.6   |
| 85°    | 42.4   | 21.7   | 18.7   | 18.7   | 18.7   |
| 87.5°  | 15.8   | 7.9    | 7.9    | 6.9    | 6.9    |
| 90°    | 1.0    | 12.3   | 20.4   | 25.5   | 27.6   |
| 92.5°  | 25.5   | 21.5   | 24.5   | 26.6   | 27.6   |
| 95°    | 66.4   | 32.7   | 39.8   | 44.9   | 43.9   |
| 97.5°  | 119.5  | 35.8   | 52.1   | 55.2   | 56.2   |
| 100°   | 180.8  | 40.9   | 58.2   | 66.4   | 68.4   |
| 102.5° | 248.2  | 246.2  | 60.3   | 71.5   | 74.6   |
| 105°   | 310.5  | 341.2  | 62.3   | 73.5   | 77.6   |
| 107.5° | 383.1  | 408.6  | 64.4   | 75.6   | 79.7   |
| 110°   | 452.5  | 474.0  | 178.8  | 76.6   | 80.7   |

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**CANDELA DISTRIBUTION (continued):**

|        | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|--------|--------|--------|--------|--------|--------|
| 112.5° | 517.9  | 536.3  | 518.9  | 78.7   | 81.7   |
| 115°   | 587.3  | 604.7  | 630.2  | 157.3  | 83.8   |
| 117.5° | 647.6  | 668.0  | 685.4  | 539.3  | 271.7  |
| 120°   | 715.0  | 730.3  | 748.7  | 761.0  | 623.1  |
| 122.5° | 772.2  | 788.6  | 809.0  | 815.1  | 816.2  |
| 125°   | 830.5  | 843.7  | 863.1  | 870.3  | 873.4  |
| 127.5° | 883.6  | 897.9  | 913.2  | 923.4  | 924.4  |
| 130°   | 933.6  | 950.0  | 961.2  | 972.4  | 971.4  |
| 132.5° | 984.7  | 998.0  | 1009.2 | 1018.4 | 1017.4 |
| 135°   | 1027.6 | 1043.9 | 1053.1 | 1063.3 | 1061.3 |
| 137.5° | 1072.5 | 1084.8 | 1095.0 | 1105.2 | 1102.2 |
| 140°   | 1116.5 | 1124.6 | 1135.9 | 1145.1 | 1140.0 |
| 142.5° | 1153.2 | 1160.4 | 1173.7 | 1181.8 | 1176.7 |
| 145°   | 1192.1 | 1191.0 | 1208.4 | 1215.5 | 1210.4 |
| 147.5° | 1225.8 | 1222.7 | 1240.1 | 1245.2 | 1241.1 |
| 150°   | 1258.4 | 1251.3 | 1267.6 | 1273.8 | 1268.7 |
| 152.5° | 1286.0 | 1277.9 | 1293.2 | 1299.3 | 1292.2 |
| 155°   | 1312.6 | 1303.4 | 1315.7 | 1321.8 | 1313.6 |
| 157.5° | 1334.0 | 1325.9 | 1335.1 | 1342.2 | 1334.0 |
| 160°   | 1352.4 | 1346.3 | 1352.4 | 1358.6 | 1351.4 |
| 162.5° | 1368.8 | 1362.6 | 1367.7 | 1374.9 | 1365.7 |
| 165°   | 1383.1 | 1376.9 | 1380.0 | 1387.2 | 1380.0 |
| 167.5° | 1394.3 | 1388.2 | 1391.2 | 1398.4 | 1389.2 |
| 170°   | 1403.5 | 1397.4 | 1399.4 | 1406.6 | 1397.4 |
| 172.5° | 1409.6 | 1403.5 | 1405.5 | 1412.7 | 1403.5 |
| 175°   | 1414.7 | 1407.6 | 1409.6 | 1416.8 | 1406.6 |
| 177.5° | 1416.8 | 1409.6 | 1410.6 | 1417.8 | 1408.6 |
| 180°   | 1411.7 | 1411.7 | 1411.7 | 1411.7 | 1411.7 |

(END OF REPORT)