

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: P1010101

Luminaire Tested: S122RDIP-B675D1080UB27-4F0-XX-W2A-F

Issue Date: 5/6/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1010101  
REPORT IS A COMBINATION OF REPORTS P988421 AND P1007351  
Test Lab: INNOVATION CENTER  
Issue Date: 5/6/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S122RDIP-B675D1080UB27-4F0-XX-W2A-F  
Description: Define 2 Regressed Direct/Indirect Pendant with 2700K BioUP LEDs {m-DER=0.473}  
{m-EER=0.52}  
Light Source: -  
Ballast/Driver: -

**Summary**

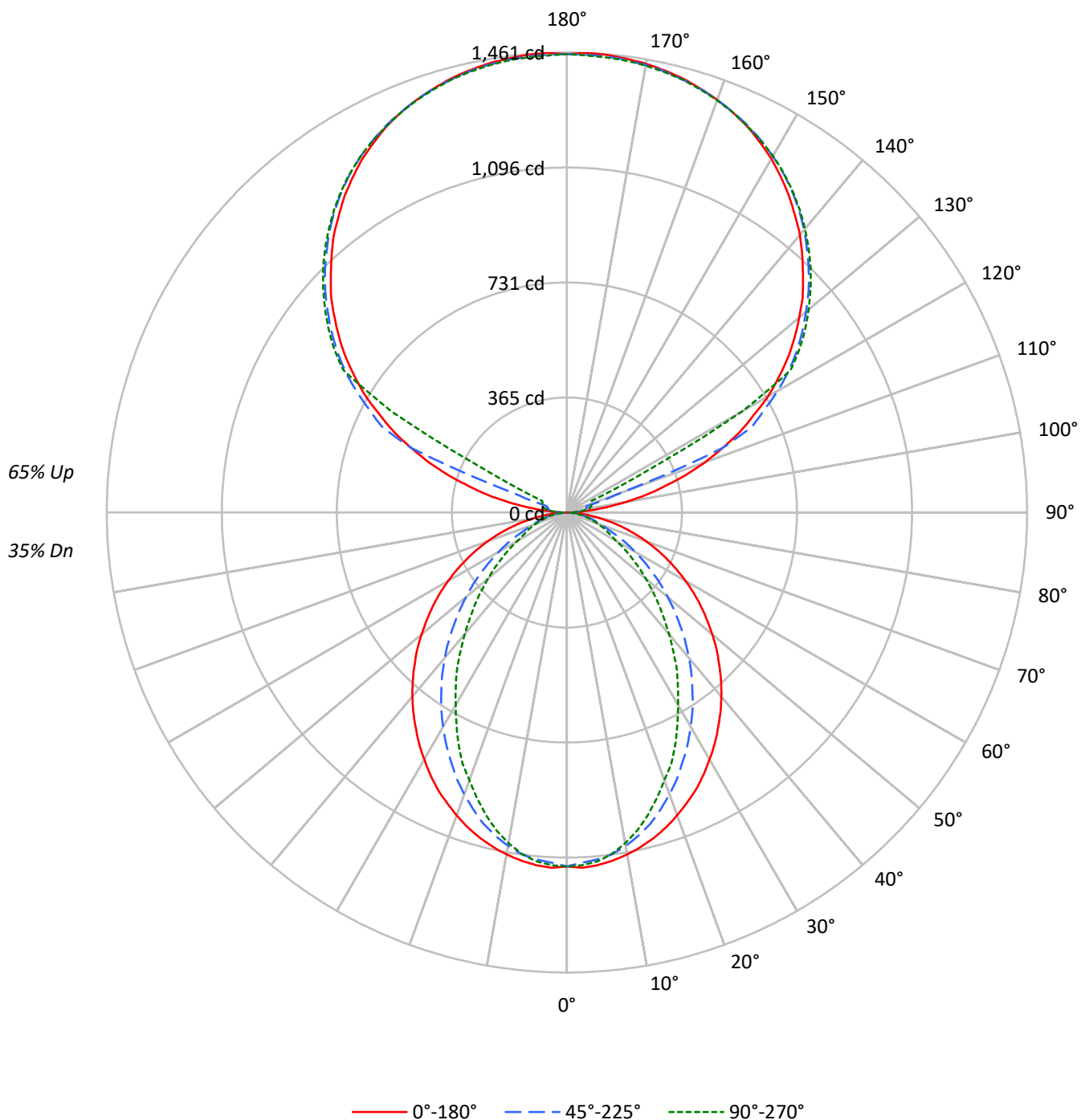
Lumens per Lamp: N/A  
Luminaire Lumens: 6582.0 lumens  
Efficiency: N/A  
Efficacy: 92.8 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 0.99 / 1.16  
Luminous Opening: Rectangular w/ Sides (W: 0.17' x L: 4' x H: 0.1')  
CIE Type: Semi-Indirect

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°  | 17795 | 17795 | 17795 |
| 5°  | 17824 | 16930 | 16805 |
| 10° | 17648 | 16056 | 15527 |
| 15° | 17405 | 15027 | 14070 |
| 20° | 17086 | 13854 | 12548 |
| 25° | 16757 | 12653 | 11155 |
| 30° | 16314 | 11481 | 9633  |
| 35° | 15883 | 10299 | 8327  |
| 40° | 15442 | 9141  | 6981  |
| 45° | 14932 | 7943  | 5807  |
| 50° | 14403 | 6788  | 4728  |
| 55° | 13853 | 5634  | 3754  |
| 60° | 13212 | 4507  | 2840  |
| 65° | 12478 | 3435  | 2309  |
| 70° | 11589 | 2492  | 1836  |
| 75° | 10472 | 1901  | 1401  |
| 80° | 8854  | 1286  | 942   |
| 85° | 6173  | 588   | 454   |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 14932 cd/sqm

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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 105.4  | 1.6       |
| 10°-20°   | 289.2  | 4.4       |
| 20°-30°   | 406.1  | 6.2       |
| 30°-40°   | 442.6  | 6.7       |
| 40°-50°   | 406.8  | 6.2       |
| 50°-60°   | 319.5  | 4.9       |
| 60°-70°   | 208.0  | 3.2       |
| 70°-80°   | 107.1  | 1.6       |
| 80°-90°   | 29.9   | 0.5       |
| 90°-100°  | 48.0   | 0.7       |
| 100°-110° | 178.9  | 2.7       |
| 110°-120° | 474.6  | 7.2       |
| 120°-130° | 787.1  | 12.0      |
| 130°-140° | 836.1  | 12.7      |
| 140°-150° | 777.0  | 11.8      |
| 150°-160° | 624.7  | 9.5       |
| 160°-170° | 402.5  | 6.1       |
| 170°-180° | 138.5  | 2.1       |
| 0°-30°    | 800.7  | 12.2      |
| 0°-40°    | 1243.3 | 18.9      |
| 0°-60°    | 1969.7 | 29.9      |
| 0°-90°    | 2314.6 | 35.2      |
| 90°-120°  | 701.5  | 10.7      |
| 90°-150°  | 3101.6 | 47.1      |
| 90°-180°  | 4267.0 | 64.8      |
| 0°-180°   | 6582.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|      | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|------|------|-------|------|-------|------|------|
| 0°   | 1124 | 1124  | 1124 | 1124  | 1124 |      |
| 5°   | 1124 | 1119  | 1106 | 1115  | 1112 | 107  |
| 15°  | 1069 | 1058  | 1024 | 1004  | 994  | 301  |
| 25°  | 971  | 938   | 871  | 829   | 814  | 446  |
| 35°  | 836  | 784   | 695  | 631   | 608  | 523  |
| 45°  | 684  | 616   | 509  | 436   | 412  | 528  |
| 55°  | 520  | 440   | 331  | 270   | 250  | 465  |
| 65°  | 351  | 269   | 177  | 142   | 139  | 348  |
| 75°  | 187  | 116   | 81   | 74    | 73   | 198  |
| 85°  | 44   | 22    | 19   | 19    | 19   | 50   |
| 90°  | 1    | 13    | 21   | 26    | 28   | 6    |
| 95°  | 68   | 34    | 41   | 46    | 45   | 81   |
| 105° | 320  | 352   | 64   | 76    | 80   | 342  |
| 115° | 606  | 624   | 650  | 162   | 86   | 596  |
| 125° | 856  | 870   | 890  | 897   | 901  | 764  |
| 135° | 1060 | 1076  | 1086 | 1096  | 1094 | 819  |
| 145° | 1229 | 1228  | 1246 | 1253  | 1248 | 769  |
| 155° | 1354 | 1344  | 1357 | 1363  | 1354 | 624  |
| 165° | 1426 | 1420  | 1423 | 1430  | 1423 | 403  |
| 175° | 1459 | 1451  | 1454 | 1461  | 1450 | 139  |
| 180° | 1456 | 1456  | 1456 | 1456  | 1456 |      |

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**CANDELA DISTRIBUTION (FULL):**

|        | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|--------|--------|--------|--------|--------|--------|
| 0°     | 1124.2 | 1124.2 | 1124.2 | 1124.2 | 1124.2 |
| 2.5°   | 1129.3 | 1124.2 | 1113.0 | 1123.2 | 1121.1 |
| 5°     | 1124.2 | 1119.1 | 1105.9 | 1115.0 | 1112.0 |
| 7.5°   | 1115.0 | 1108.9 | 1094.7 | 1098.7 | 1093.6 |
| 10°    | 1102.8 | 1095.7 | 1075.3 | 1072.3 | 1066.2 |
| 12.5°  | 1087.5 | 1078.4 | 1050.9 | 1044.8 | 1033.6 |
| 15°    | 1069.2 | 1058.0 | 1023.5 | 1004.1 | 993.9  |
| 17.5°  | 1047.9 | 1031.6 | 988.9  | 966.5  | 950.2  |
| 20°    | 1023.5 | 1003.1 | 952.2  | 926.8  | 904.4  |
| 22.5°  | 997.0  | 973.6  | 914.6  | 880.0  | 864.7  |
| 25°    | 970.6  | 938.0  | 870.9  | 829.1  | 813.9  |
| 27.5°  | 939.0  | 904.4  | 830.2  | 782.3  | 758.9  |
| 30°    | 905.4  | 866.8  | 785.4  | 733.5  | 706.0  |
| 32.5°  | 872.9  | 826.1  | 742.7  | 681.6  | 656.2  |
| 35°    | 836.3  | 784.4  | 694.8  | 630.8  | 608.4  |
| 37.5°  | 800.7  | 744.7  | 650.1  | 579.9  | 554.5  |
| 40°    | 763.0  | 702.0  | 603.3  | 531.1  | 504.6  |
| 42.5°  | 724.4  | 659.2  | 556.5  | 481.2  | 455.8  |
| 45°    | 683.7  | 615.5  | 508.7  | 436.4  | 412.0  |
| 47.5°  | 645.0  | 572.8  | 462.9  | 390.7  | 368.3  |
| 50°    | 602.3  | 530.0  | 418.1  | 347.9  | 326.6  |
| 52.5°  | 560.6  | 484.3  | 375.4  | 308.3  | 288.9  |
| 55°    | 519.9  | 440.5  | 330.6  | 269.6  | 250.3  |
| 57.5°  | 478.2  | 396.8  | 291.0  | 234.0  | 217.7  |
| 60°    | 435.4  | 354.0  | 249.3  | 197.4  | 181.1  |
| 62.5°  | 393.7  | 312.3  | 213.6  | 164.8  | 156.7  |
| 65°    | 351.0  | 268.6  | 177.0  | 142.4  | 139.4  |
| 67.5°  | 310.3  | 227.9  | 142.4  | 125.1  | 122.1  |
| 70°    | 267.6  | 188.2  | 118.0  | 107.8  | 103.8  |
| 72.5°  | 226.9  | 151.6  | 98.7   | 90.5   | 88.5   |
| 75°    | 187.2  | 116.0  | 81.4   | 74.3   | 73.2   |
| 77.5°  | 147.5  | 82.4   | 64.1   | 60.0   | 58.0   |
| 80°    | 110.9  | 59.0   | 48.8   | 44.8   | 44.8   |
| 82.5°  | 77.3   | 39.7   | 33.6   | 31.5   | 31.5   |
| 85°    | 43.7   | 22.4   | 19.3   | 19.3   | 19.3   |
| 87.5°  | 16.3   | 8.1    | 8.1    | 7.1    | 7.1    |
| 90°    | 1.1    | 12.6   | 21.1   | 26.3   | 28.4   |
| 92.5°  | 26.3   | 22.1   | 25.3   | 27.4   | 28.4   |
| 95°    | 68.5   | 33.7   | 41.1   | 46.3   | 45.3   |
| 97.5°  | 123.2  | 36.9   | 53.7   | 56.9   | 57.9   |
| 100°   | 186.4  | 42.1   | 60.0   | 68.5   | 70.6   |
| 102.5° | 255.9  | 253.8  | 62.1   | 73.7   | 76.9   |
| 105°   | 320.2  | 351.8  | 64.3   | 75.8   | 80.0   |
| 107.5° | 395.0  | 421.3  | 66.4   | 77.9   | 82.2   |
| 110°   | 466.6  | 488.7  | 184.3  | 79.0   | 83.2   |

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**CANDELA DISTRIBUTION (continued):**

|        | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|--------|--------|--------|--------|--------|--------|
| 112.5° | 534.0  | 553.0  | 535.1  | 81.1   | 84.3   |
| 115°   | 605.6  | 623.5  | 649.9  | 162.2  | 86.4   |
| 117.5° | 667.8  | 688.9  | 706.8  | 556.1  | 280.2  |
| 120°   | 737.3  | 753.1  | 772.1  | 784.7  | 642.5  |
| 122.5° | 796.3  | 813.1  | 834.2  | 840.5  | 841.6  |
| 125°   | 856.3  | 870.0  | 890.0  | 897.4  | 900.6  |
| 127.5° | 911.1  | 925.8  | 941.6  | 952.2  | 953.2  |
| 130°   | 962.7  | 979.6  | 991.1  | 1002.7 | 1001.7 |
| 132.5° | 1015.4 | 1029.1 | 1040.6 | 1050.1 | 1049.1 |
| 135°   | 1059.6 | 1076.5 | 1085.9 | 1096.5 | 1094.4 |
| 137.5° | 1106.0 | 1118.6 | 1129.1 | 1139.7 | 1136.5 |
| 140°   | 1151.2 | 1159.7 | 1171.3 | 1180.7 | 1175.5 |
| 142.5° | 1189.2 | 1196.5 | 1210.2 | 1218.7 | 1213.4 |
| 145°   | 1229.2 | 1228.1 | 1246.0 | 1253.4 | 1248.1 |
| 147.5° | 1263.9 | 1260.8 | 1278.7 | 1284.0 | 1279.7 |
| 150°   | 1297.7 | 1290.3 | 1307.1 | 1313.5 | 1308.2 |
| 152.5° | 1326.1 | 1317.7 | 1333.5 | 1339.8 | 1332.4 |
| 155°   | 1353.5 | 1344.0 | 1356.6 | 1363.0 | 1354.5 |
| 157.5° | 1375.6 | 1367.2 | 1376.6 | 1384.0 | 1375.6 |
| 160°   | 1394.6 | 1388.2 | 1394.6 | 1400.9 | 1393.5 |
| 162.5° | 1411.4 | 1405.1 | 1410.4 | 1417.7 | 1408.2 |
| 165°   | 1426.2 | 1419.8 | 1423.0 | 1430.4 | 1423.0 |
| 167.5° | 1437.7 | 1431.4 | 1434.6 | 1442.0 | 1432.5 |
| 170°   | 1447.2 | 1440.9 | 1443.0 | 1450.4 | 1440.9 |
| 172.5° | 1453.5 | 1447.2 | 1449.3 | 1456.7 | 1447.2 |
| 175°   | 1458.8 | 1451.4 | 1453.5 | 1460.9 | 1450.4 |
| 177.5° | 1460.9 | 1453.5 | 1454.6 | 1462.0 | 1452.5 |
| 180°   | 1455.6 | 1455.6 | 1455.6 | 1455.6 | 1455.6 |

(END OF REPORT)