

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: P1010148

Luminaire Tested: S122RDIP-B675D330UB40-4F0-XX-W2A-F1

Issue Date: 5/6/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1010148  
REPORT IS A COMBINATION OF REPORTS P988490 AND P1007351  
Test Lab: INNOVATION CENTER  
Issue Date: 5/6/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S122RDIP-B675D330UB40-4F0-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**

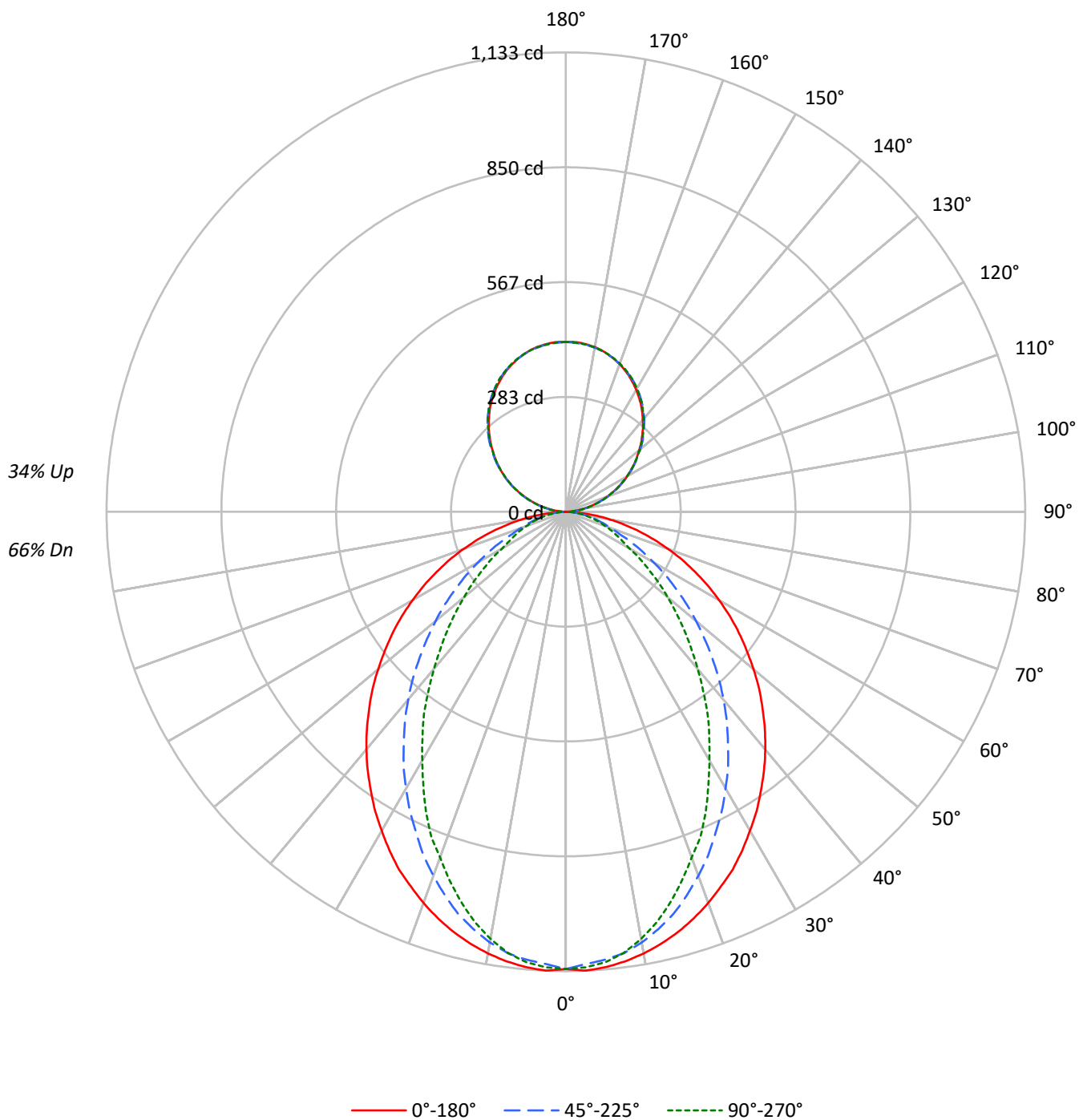
Lumens per Lamp: N/A  
Luminaire Lumens: 3491.0 lumens  
Efficiency: N/A  
Efficacy: 77.2 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 0.99 / 1.16  
Luminous Opening: Rectangular w/ Sides (W: 0.17' x L: 4' x H: 0.1')  
CIE Type: Semi-Direct

Input Watts (W): 45.2  
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   | 111 | 111 | 111 | 111 | 105 | 105 | 105 | 105 | 92 | 92 | 92 | 81 | 81 | 81 | 71 | 71 | 71 |
| 1   | 102 | 98  | 94  | 91  | 96  | 92  | 89  | 86  | 82 | 80 | 77 | 73 | 71 | 69 | 64 | 63 | 61 |
| 2   | 94  | 86  | 80  | 75  | 88  | 82  | 76  | 72  | 73 | 69 | 65 | 65 | 62 | 59 | 57 | 55 | 53 |
| 3   | 86  | 76  | 69  | 64  | 81  | 72  | 66  | 61  | 65 | 60 | 56 | 58 | 54 | 51 | 51 | 48 | 46 |
| 4   | 79  | 68  | 60  | 54  | 74  | 65  | 58  | 52  | 58 | 52 | 48 | 52 | 47 | 44 | 46 | 43 | 40 |
| 5   | 73  | 61  | 53  | 47  | 68  | 58  | 51  | 45  | 52 | 46 | 42 | 47 | 42 | 39 | 42 | 38 | 35 |
| 6   | 67  | 55  | 47  | 41  | 63  | 53  | 45  | 40  | 47 | 42 | 37 | 43 | 38 | 34 | 38 | 34 | 31 |
| 7   | 62  | 50  | 42  | 37  | 59  | 48  | 41  | 35  | 43 | 37 | 33 | 39 | 34 | 31 | 35 | 31 | 28 |
| 8   | 58  | 46  | 38  | 33  | 55  | 44  | 37  | 32  | 40 | 34 | 30 | 36 | 31 | 28 | 32 | 28 | 25 |
| 9   | 54  | 42  | 35  | 30  | 51  | 40  | 33  | 29  | 37 | 31 | 27 | 33 | 28 | 25 | 30 | 26 | 23 |
| 10  | 51  | 39  | 32  | 27  | 48  | 37  | 30  | 26  | 34 | 28 | 24 | 31 | 26 | 23 | 28 | 24 | 21 |

**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  | 3.0       |
| 10°-20°   | 290.1  | 8.3       |
| 20°-30°   | 407.3  | 11.7      |
| 30°-40°   | 444.0  | 12.7      |
| 40°-50°   | 408.1  | 11.7      |
| 50°-60°   | 320.5  | 9.2       |
| 60°-70°   | 208.6  | 6.0       |
| 70°-80°   | 107.4  | 3.1       |
| 80°-90°   | 28.6   | 0.8       |
| 90°-100°  | 25.9   | 0.7       |
| 100°-110° | 82.3   | 2.4       |
| 110°-120° | 140.9  | 4.0       |
| 120°-130° | 185.3  | 5.3       |
| 130°-140° | 208.0  | 6.0       |
| 140°-150° | 204.0  | 5.8       |
| 150°-160° | 171.1  | 4.9       |
| 160°-170° | 113.5  | 3.3       |
| 170°-180° | 39.7   | 1.1       |
| 0°-30°    | 803.1  | 23.0      |
| 0°-40°    | 1247.1 | 35.7      |
| 0°-60°    | 1975.6 | 56.6      |
| 0°-90°    | 2320.2 | 66.5      |
| 90°-120°  | 249.2  | 7.1       |
| 90°-150°  | 846.5  | 24.2      |
| 90°-180°  | 1171.0 | 33.5      |
| 0°-180°   | 3491.0 | 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°  | 0    | 5     | 12   | 12    | 12   | 3    |
| 95°  | 18   | 22    | 23   | 23    | 22   | 21   |
| 105° | 76   | 77    | 78   | 78    | 78   | 80   |
| 115° | 141  | 144   | 143  | 142   | 141  | 140  |
| 125° | 206  | 209   | 208  | 207   | 206  | 184  |
| 135° | 266  | 270   | 271  | 270   | 269  | 206  |
| 145° | 323  | 326   | 328  | 328   | 326  | 202  |
| 155° | 369  | 370   | 371  | 373   | 372  | 170  |
| 165° | 402  | 402   | 402  | 404   | 402  | 113  |
| 175° | 418  | 417   | 416  | 419   | 417  | 40   |
| 180° | 419  | 419   | 419  | 419   | 419  |      |

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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°    | 0.4    | 4.6    | 12.4   | 11.7   | 12.0   |
| 92.5°  | 7.8    | 10.6   | 11.0   | 11.3   | 11.3   |
| 95°    | 18.4   | 21.9   | 22.6   | 22.6   | 21.9   |
| 97.5°  | 30.7   | 33.9   | 35.3   | 35.3   | 35.3   |
| 100°   | 44.9   | 47.7   | 48.8   | 48.8   | 48.4   |
| 102.5° | 59.7   | 61.8   | 63.3   | 63.6   | 63.3   |
| 105°   | 76.0   | 77.0   | 77.7   | 78.5   | 78.5   |
| 107.5° | 92.2   | 93.6   | 93.6   | 94.0   | 92.2   |
| 110°   | 107.8  | 109.9  | 109.9  | 109.9  | 108.8  |

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**CANDELA DISTRIBUTION (continued):**

|        | 0°    | 22.5° | 45°   | 67.5° | 90°   |
|--------|-------|-------|-------|-------|-------|
| 112.5° | 124.7 | 126.9 | 126.5 | 125.5 | 124.7 |
| 115°   | 141.4 | 143.5 | 142.8 | 142.4 | 141.4 |
| 117.5° | 158.0 | 160.8 | 159.0 | 158.0 | 156.9 |
| 120°   | 174.6 | 177.4 | 174.6 | 174.6 | 173.5 |
| 122.5° | 189.8 | 193.3 | 191.5 | 190.5 | 189.8 |
| 125°   | 205.7 | 208.9 | 207.8 | 206.7 | 206.4 |
| 127.5° | 221.2 | 225.1 | 223.7 | 222.3 | 221.2 |
| 130°   | 235.7 | 240.3 | 239.6 | 238.9 | 237.5 |
| 132.5° | 252.0 | 255.5 | 255.9 | 254.1 | 253.0 |
| 135°   | 266.1 | 270.0 | 270.7 | 270.3 | 269.3 |
| 137.5° | 281.7 | 284.8 | 285.5 | 285.2 | 283.8 |
| 140°   | 295.4 | 298.6 | 300.4 | 300.4 | 299.0 |
| 142.5° | 309.6 | 312.8 | 313.8 | 314.2 | 312.8 |
| 145°   | 323.0 | 325.5 | 327.6 | 328.0 | 326.5 |
| 147.5° | 335.0 | 338.2 | 339.6 | 340.3 | 338.9 |
| 150°   | 347.4 | 349.5 | 350.9 | 352.0 | 350.9 |
| 152.5° | 358.3 | 360.5 | 362.2 | 363.6 | 362.2 |
| 155°   | 369.3 | 370.4 | 371.4 | 373.2 | 372.1 |
| 157.5° | 378.8 | 379.5 | 380.3 | 382.7 | 381.0 |
| 160°   | 387.3 | 388.0 | 388.4 | 390.5 | 389.1 |
| 162.5° | 395.1 | 395.1 | 395.4 | 397.9 | 396.2 |
| 165°   | 401.8 | 401.5 | 401.5 | 403.9 | 402.2 |
| 167.5° | 407.8 | 406.8 | 406.8 | 409.2 | 407.5 |
| 170°   | 412.4 | 411.4 | 411.0 | 413.5 | 411.4 |
| 172.5° | 415.6 | 414.5 | 414.2 | 416.7 | 414.5 |
| 175°   | 418.1 | 417.0 | 416.3 | 418.8 | 416.7 |
| 177.5° | 419.5 | 418.4 | 417.7 | 419.8 | 417.7 |
| 180°   | 418.8 | 418.8 | 418.8 | 418.8 | 418.8 |

(END OF REPORT)