

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: P1008590

Luminaire Tested: S122DIP-B1005D330UB27-4F0-XX-W2A-D1

Issue Date: 5/6/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1008590  
REPORT IS A COMBINATION OF REPORTS P983582 AND P1007351  
Test Lab: INNOVATION CENTER  
Issue Date: 5/6/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S122DIP-B1005D330UB27-4F0-XX-W2A-D1  
Description: Define 2 Direct/Indirect Pendant with 2700K BioUP LEDs {m-DER=0.473} {m-EER=0.52}  
Light Source: -  
Ballast/Driver: -

**Summary**

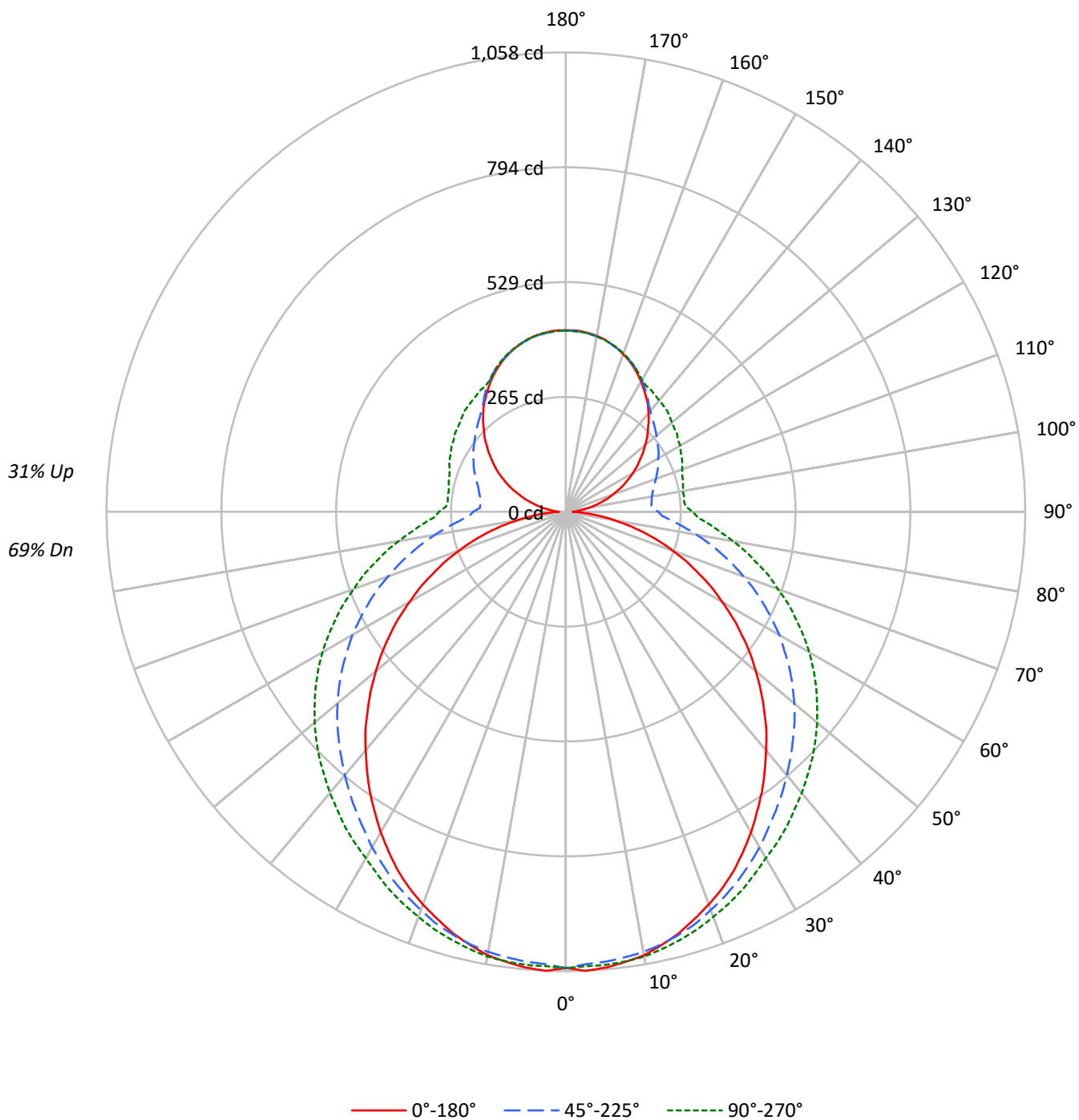
Lumens per Lamp: N/A  
Luminaire Lumens: 5178.0 lumens  
Efficiency: N/A  
Efficacy: 73.3 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.31 / 1.42  
Luminous Opening: Rectangular w/ Sides (W: 0.17' x L: 4' x H: 0.1')  
CIE Type: Semi-Direct

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

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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   | 112 | 112 | 112 | 112 | 105 | 105 | 105 | 105 | 94 | 94 | 94 | 83 | 83 | 83 | 73 | 73 | 73 |
| 1   | 100 | 95  | 90  | 85  | 94  | 89  | 85  | 81  | 79 | 76 | 73 | 70 | 68 | 65 | 62 | 60 | 58 |
| 2   | 90  | 81  | 74  | 68  | 85  | 77  | 70  | 65  | 68 | 63 | 59 | 60 | 56 | 53 | 53 | 50 | 47 |
| 3   | 82  | 71  | 63  | 56  | 77  | 67  | 59  | 53  | 60 | 54 | 49 | 53 | 48 | 44 | 46 | 43 | 39 |
| 4   | 75  | 62  | 54  | 47  | 70  | 59  | 51  | 45  | 53 | 46 | 41 | 47 | 41 | 37 | 41 | 37 | 33 |
| 5   | 68  | 55  | 46  | 40  | 64  | 53  | 44  | 38  | 47 | 40 | 35 | 42 | 36 | 32 | 37 | 32 | 29 |
| 6   | 63  | 50  | 41  | 34  | 59  | 47  | 39  | 33  | 42 | 35 | 30 | 38 | 32 | 28 | 33 | 29 | 25 |
| 7   | 58  | 45  | 36  | 30  | 55  | 43  | 35  | 29  | 38 | 31 | 27 | 34 | 29 | 24 | 30 | 26 | 22 |
| 8   | 54  | 41  | 32  | 27  | 51  | 39  | 31  | 26  | 35 | 28 | 24 | 31 | 26 | 22 | 28 | 23 | 20 |
| 9   | 50  | 37  | 29  | 24  | 47  | 35  | 28  | 23  | 32 | 26 | 21 | 29 | 23 | 19 | 26 | 21 | 18 |
| 10  | 47  | 34  | 26  | 21  | 44  | 33  | 25  | 21  | 29 | 23 | 19 | 27 | 21 | 18 | 24 | 19 | 16 |

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

|     | 0°    | 45°   | 90°   |
|-----|-------|-------|-------|
| 0°  | 16632 | 16632 | 16632 |
| 5°  | 16706 | 15921 | 15831 |
| 10° | 16595 | 15371 | 15146 |
| 15° | 16360 | 14799 | 14442 |
| 20° | 16066 | 14201 | 13775 |
| 25° | 15773 | 13627 | 13169 |
| 30° | 15364 | 13044 | 12569 |
| 35° | 14950 | 12483 | 12129 |
| 40° | 14515 | 11997 | 11692 |
| 45° | 14100 | 11555 | 11311 |
| 50° | 13655 | 11149 | 10935 |
| 55° | 13187 | 10718 | 10551 |
| 60° | 12614 | 10269 | 10149 |
| 65° | 12016 | 9752  | 9684  |
| 70° | 11342 | 9198  | 9185  |
| 75° | 10478 | 8643  | 8715  |
| 80° | 9117  | 8066  | 8226  |
| 85° | 7741  | 7522  | 7807  |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 14100 cd/sqm

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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 99.6   | 1.9       |
| 10°-20°   | 285.7  | 5.5       |
| 20°-30°   | 432.8  | 8.4       |
| 30°-40°   | 527.1  | 10.2      |
| 40°-50°   | 567.1  | 11.0      |
| 50°-60°   | 550.7  | 10.6      |
| 60°-70°   | 481.0  | 9.3       |
| 70°-80°   | 370.2  | 7.1       |
| 80°-90°   | 249.1  | 4.8       |
| 90°-100°  | 196.9  | 3.8       |
| 100°-110° | 207.1  | 4.0       |
| 110°-120° | 223.0  | 4.3       |
| 120°-130° | 230.8  | 4.5       |
| 130°-140° | 226.8  | 4.4       |
| 140°-150° | 206.7  | 4.0       |
| 150°-160° | 170.7  | 3.3       |
| 160°-170° | 113.2  | 2.2       |
| 170°-180° | 39.6   | 0.8       |
| 0°-30°    | 818.1  | 15.8      |
| 0°-40°    | 1345.2 | 26.0      |
| 0°-60°    | 2463.0 | 47.6      |
| 0°-90°    | 3563.3 | 68.8      |
| 90°-120°  | 627.0  | 12.1      |
| 90°-150°  | 1291.3 | 24.9      |
| 90°-180°  | 1615.0 | 31.2      |
| 0°-180°   | 5178.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|      | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|------|------|-------|------|-------|------|------|
| 0°   | 1051 | 1051  | 1051 | 1051  | 1051 |      |
| 5°   | 1054 | 1049  | 1040 | 1049  | 1048 | 100  |
| 15°  | 1005 | 1008  | 1008 | 1022  | 1020 | 283  |
| 25°  | 914  | 924   | 938  | 956   | 961  | 420  |
| 35°  | 787  | 813   | 842  | 876   | 886  | 492  |
| 45°  | 646  | 687   | 740  | 787   | 802  | 498  |
| 55°  | 495  | 550   | 629  | 684   | 704  | 443  |
| 65°  | 338  | 413   | 502  | 565   | 585  | 336  |
| 75°  | 187  | 273   | 370  | 436   | 455  | 198  |
| 85°  | 55   | 149   | 247  | 311   | 332  | 58   |
| 90°  | 16   | 108   | 213  | 274   | 292  | 12   |
| 95°  | 30   | 106   | 198  | 256   | 273  | 30   |
| 105° | 83   | 129   | 208  | 262   | 279  | 89   |
| 115° | 147  | 166   | 234  | 279   | 295  | 145  |
| 125° | 208  | 211   | 259  | 299   | 312  | 187  |
| 135° | 267  | 271   | 287  | 318   | 330  | 207  |
| 145° | 322  | 325   | 327  | 336   | 342  | 202  |
| 155° | 368  | 369   | 370  | 372   | 371  | 170  |
| 165° | 401  | 400   | 400  | 403   | 401  | 113  |
| 175° | 417  | 416   | 415  | 418   | 416  | 40   |
| 180° | 418  | 418   | 418  | 418   | 418  |      |

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**CANDELA DISTRIBUTION (FULL):**

|        | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|--------|--------|--------|--------|--------|--------|
| 0°     | 1050.7 | 1050.7 | 1050.7 | 1050.7 | 1050.7 |
| 2.5°   | 1058.3 | 1053.7 | 1043.1 | 1050.7 | 1047.6 |
| 5°     | 1053.7 | 1049.2 | 1040.0 | 1049.2 | 1047.6 |
| 7.5°   | 1046.1 | 1043.1 | 1035.4 | 1046.1 | 1044.6 |
| 10°    | 1037.0 | 1033.9 | 1029.4 | 1041.5 | 1040.0 |
| 12.5°  | 1021.7 | 1023.3 | 1020.2 | 1032.4 | 1030.9 |
| 15°    | 1005.0 | 1008.0 | 1008.0 | 1021.7 | 1020.2 |
| 17.5°  | 983.7  | 989.8  | 994.3  | 1008.0 | 1008.0 |
| 20°    | 962.4  | 970.0  | 976.1  | 992.8  | 992.8  |
| 22.5°  | 939.5  | 948.7  | 957.8  | 974.5  | 977.6  |
| 25°    | 913.6  | 924.3  | 938.0  | 956.3  | 960.8  |
| 27.5°  | 883.2  | 899.9  | 915.2  | 938.0  | 941.0  |
| 30°    | 852.7  | 872.5  | 892.3  | 916.7  | 921.2  |
| 32.5°  | 819.2  | 842.1  | 866.4  | 895.4  | 904.5  |
| 35°    | 787.2  | 813.1  | 842.1  | 875.6  | 886.2  |
| 37.5°  | 752.2  | 781.2  | 817.7  | 854.2  | 864.9  |
| 40°    | 717.2  | 750.7  | 791.8  | 831.4  | 845.1  |
| 42.5°  | 683.7  | 717.2  | 765.9  | 810.1  | 823.8  |
| 45°    | 645.6  | 686.7  | 740.0  | 787.2  | 802.5  |
| 47.5°  | 609.1  | 653.2  | 714.2  | 762.9  | 779.6  |
| 50°    | 571.0  | 618.2  | 686.7  | 738.5  | 755.3  |
| 52.5°  | 534.5  | 584.7  | 657.8  | 711.1  | 729.4  |
| 55°    | 494.9  | 549.7  | 628.9  | 683.7  | 703.5  |
| 57.5°  | 456.8  | 517.7  | 596.9  | 656.3  | 676.1  |
| 60°    | 415.7  | 481.2  | 568.0  | 625.8  | 647.2  |
| 62.5°  | 379.2  | 447.7  | 534.5  | 596.9  | 616.7  |
| 65°    | 338.0  | 412.7  | 502.5  | 564.9  | 584.7  |
| 67.5°  | 301.5  | 379.2  | 470.5  | 533.0  | 554.3  |
| 70°    | 261.9  | 341.1  | 435.5  | 501.0  | 519.2  |
| 72.5°  | 225.4  | 307.6  | 403.5  | 467.5  | 490.3  |
| 75°    | 187.3  | 272.6  | 370.0  | 435.5  | 455.3  |
| 77.5°  | 150.7  | 239.1  | 338.0  | 403.5  | 424.8  |
| 80°    | 114.2  | 207.1  | 306.1  | 370.0  | 391.3  |
| 82.5°  | 83.7   | 175.1  | 275.6  | 339.6  | 359.4  |
| 85°    | 54.8   | 149.2  | 246.7  | 310.6  | 332.0  |
| 87.5°  | 33.5   | 124.9  | 222.3  | 284.7  | 304.5  |
| 90°    | 15.6   | 108.1  | 213.3  | 273.5  | 292.2  |
| 92.5°  | 21.5   | 105.0  | 198.2  | 258.0  | 276.3  |
| 95°    | 30.5   | 105.6  | 197.7  | 255.6  | 273.1  |
| 97.5°  | 41.4   | 109.9  | 199.7  | 256.0  | 274.3  |
| 100°   | 55.5   | 114.6  | 200.9  | 257.2  | 273.7  |
| 102.5° | 68.7   | 121.1  | 204.7  | 259.8  | 276.3  |
| 105°   | 83.4   | 128.6  | 208.5  | 262.5  | 279.3  |
| 107.5° | 99.6   | 137.6  | 213.7  | 265.9  | 280.8  |
| 110°   | 113.6  | 146.1  | 220.8  | 269.5  | 285.2  |



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**CANDELA DISTRIBUTION (continued):**

|        | 0°    | 22.5° | 45°   | 67.5° | 90°   |
|--------|-------|-------|-------|-------|-------|
| 112.5° | 130.5 | 157.0 | 226.7 | 274.3 | 290.4 |
| 115°   | 147.1 | 165.9 | 233.8 | 279.1 | 294.8 |
| 117.5° | 162.2 | 177.1 | 239.3 | 284.0 | 298.1 |
| 120°   | 178.7 | 187.6 | 245.7 | 288.3 | 304.1 |
| 122.5° | 193.9 | 198.9 | 253.4 | 293.5 | 306.5 |
| 125°   | 208.1 | 211.3 | 259.1 | 299.1 | 312.5 |
| 127.5° | 223.7 | 226.0 | 265.7 | 302.4 | 315.1 |
| 130°   | 238.1 | 241.2 | 272.5 | 308.3 | 319.1 |
| 132.5° | 254.3 | 256.4 | 279.6 | 312.8 | 324.0 |
| 135°   | 266.9 | 270.8 | 286.7 | 318.4 | 329.5 |
| 137.5° | 282.4 | 285.6 | 293.9 | 322.6 | 331.7 |
| 140°   | 296.2 | 297.9 | 302.6 | 327.0 | 334.7 |
| 142.5° | 310.3 | 312.0 | 313.0 | 331.7 | 337.9 |
| 145°   | 322.2 | 324.6 | 326.8 | 336.2 | 342.4 |
| 147.5° | 334.2 | 337.3 | 338.7 | 340.9 | 344.1 |
| 150°   | 346.5 | 348.6 | 350.0 | 351.1 | 350.0 |
| 152.5° | 357.4 | 359.5 | 361.3 | 362.7 | 361.3 |
| 155°   | 368.4 | 369.4 | 370.5 | 372.2 | 371.2 |
| 157.5° | 377.9 | 378.6 | 379.3 | 381.7 | 380.0 |
| 160°   | 386.3 | 387.0 | 387.4 | 389.5 | 388.1 |
| 162.5° | 394.1 | 394.1 | 394.4 | 396.9 | 395.1 |
| 165°   | 400.8 | 400.4 | 400.4 | 402.9 | 401.1 |
| 167.5° | 406.8 | 405.7 | 405.7 | 408.2 | 406.4 |
| 170°   | 411.4 | 410.3 | 409.9 | 412.4 | 410.3 |
| 172.5° | 414.5 | 413.5 | 413.1 | 415.6 | 413.5 |
| 175°   | 417.0 | 415.9 | 415.2 | 417.7 | 415.6 |
| 177.5° | 418.4 | 417.3 | 416.6 | 418.8 | 416.6 |
| 180°   | 417.7 | 417.7 | 417.7 | 417.7 | 417.7 |

(END OF REPORT)