

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: P1008591

Luminaire Tested: S122DIP-B1005D330UB27-4F0-XX-W2A-D4

Issue Date: 5/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1008591  
REPORT IS A COMBINATION OF REPORTS P983583 AND P1007351  
Test Lab: INNOVATION CENTER  
Issue Date: 5/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S122DIP-B1005D330UB27-4F0-XX-W2A-D4  
Description: Define 2 Direct/Indirect Pendant with 2700K BioUP LEDs {m-DER=0.473} {m-EER=0.52}  
Light Source: -  
Ballast/Driver: -

**Summary**

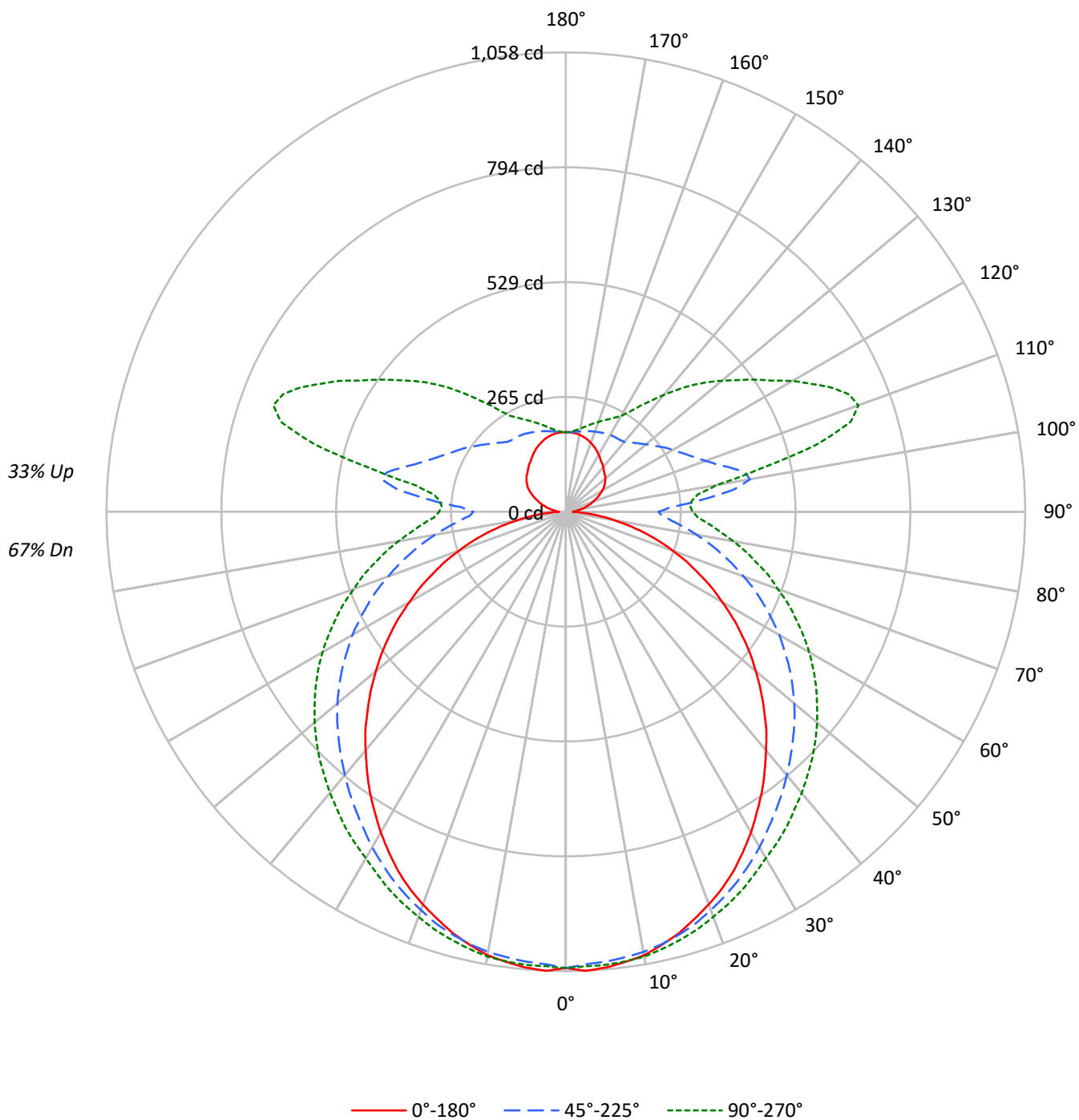
Lumens per Lamp: N/A  
Luminaire Lumens: 5287.4 lumens  
Efficiency: N/A  
Efficacy: 74.9 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.31 / 1.42  
Luminous Opening: Rectangular w/ Sides (W: 0.17' x L: 4' x H: 0.1')  
CIE Type: Semi-Direct

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   | 111 | 111 | 111 | 111 | 105 | 105 | 105 | 105 | 93 | 93 | 93 | 82 | 82 | 82 | 72 | 72 | 72 |
| 1   | 100 | 94  | 90  | 85  | 94  | 89  | 85  | 81  | 79 | 75 | 72 | 69 | 67 | 64 | 61 | 59 | 57 |
| 2   | 90  | 81  | 74  | 68  | 84  | 77  | 70  | 65  | 68 | 63 | 58 | 60 | 56 | 52 | 52 | 49 | 46 |
| 3   | 82  | 71  | 62  | 56  | 76  | 67  | 59  | 53  | 59 | 53 | 48 | 52 | 47 | 43 | 46 | 42 | 39 |
| 4   | 74  | 62  | 53  | 47  | 70  | 59  | 51  | 45  | 52 | 46 | 41 | 46 | 41 | 37 | 40 | 36 | 33 |
| 5   | 68  | 55  | 46  | 40  | 64  | 52  | 44  | 38  | 47 | 40 | 35 | 41 | 36 | 31 | 36 | 32 | 28 |
| 6   | 63  | 50  | 41  | 34  | 59  | 47  | 39  | 33  | 42 | 35 | 30 | 37 | 32 | 27 | 33 | 28 | 25 |
| 7   | 58  | 45  | 36  | 30  | 54  | 42  | 34  | 29  | 38 | 31 | 26 | 34 | 28 | 24 | 30 | 25 | 22 |
| 8   | 54  | 41  | 32  | 27  | 50  | 38  | 31  | 25  | 35 | 28 | 23 | 31 | 25 | 21 | 27 | 23 | 19 |
| 9   | 50  | 37  | 29  | 24  | 47  | 35  | 28  | 23  | 32 | 25 | 21 | 28 | 23 | 19 | 25 | 21 | 17 |
| 10  | 47  | 34  | 26  | 21  | 44  | 32  | 25  | 20  | 29 | 23 | 19 | 26 | 21 | 17 | 23 | 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  | 5.4       |
| 20°-30°   | 432.8  | 8.2       |
| 30°-40°   | 527.1  | 10.0      |
| 40°-50°   | 567.1  | 10.7      |
| 50°-60°   | 550.7  | 10.4      |
| 60°-70°   | 481.0  | 9.1       |
| 70°-80°   | 370.2  | 7.0       |
| 80°-90°   | 249.1  | 4.7       |
| 90°-100°  | 245.3  | 4.6       |
| 100°-110° | 376.0  | 7.1       |
| 110°-120° | 346.4  | 6.6       |
| 120°-130° | 263.0  | 5.0       |
| 130°-140° | 193.7  | 3.7       |
| 140°-150° | 135.0  | 2.6       |
| 150°-160° | 92.6   | 1.8       |
| 160°-170° | 54.5   | 1.0       |
| 170°-180° | 17.7   | 0.3       |
| 0°-30°    | 818.1  | 15.5      |
| 0°-40°    | 1345.2 | 25.4      |
| 0°-60°    | 2463.0 | 46.6      |
| 0°-90°    | 3563.2 | 67.4      |
| 90°-120°  | 967.7  | 18.3      |
| 90°-150°  | 1559.3 | 29.5      |
| 90°-180°  | 1724.0 | 32.6      |
| 0°-180°   | 5287.4 | 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  | 273   | 292  | 11   |
| 95°  | 24   | 114   | 313  | 285   | 291  | 22   |
| 105° | 51   | 117   | 392  | 651   | 598  | 54   |
| 115° | 82   | 118   | 310  | 588   | 676  | 81   |
| 125° | 109  | 128   | 262  | 458   | 530  | 97   |
| 135° | 126  | 149   | 224  | 356   | 412  | 97   |
| 145° | 142  | 163   | 206  | 265   | 297  | 89   |
| 155° | 161  | 174   | 200  | 227   | 236  | 74   |
| 165° | 176  | 181   | 192  | 204   | 207  | 49   |
| 175° | 183  | 183   | 185  | 187   | 186  | 17   |
| 180° | 183  | 183   | 183  | 183   | 183  |      |

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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   | 108.2  | 213.0  | 273.3  | 291.8  |
| 92.5°  | 19.0   | 111.2  | 241.6  | 271.7  | 286.5  |
| 95°    | 24.5   | 114.0  | 313.2  | 285.2  | 291.4  |
| 97.5°  | 29.0   | 116.0  | 389.6  | 325.5  | 306.4  |
| 100°   | 37.8   | 116.0  | 430.6  | 417.0  | 351.5  |
| 102.5° | 44.3   | 116.4  | 421.7  | 548.7  | 459.1  |
| 105°   | 50.6   | 116.6  | 392.1  | 650.8  | 598.1  |
| 107.5° | 59.0   | 116.8  | 363.7  | 680.2  | 687.7  |
| 110°   | 66.0   | 117.0  | 342.7  | 661.2  | 717.0  |

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**CANDELA DISTRIBUTION (continued):**

|        | 0°    | 22.5° | 45°   | 67.5° | 90°   |
|--------|-------|-------|-------|-------|-------|
| 112.5° | 73.7  | 118.6 | 324.2 | 627.8 | 705.7 |
| 115°   | 81.8  | 118.4 | 309.8 | 587.8 | 676.3 |
| 117.5° | 88.8  | 120.0 | 296.3 | 550.6 | 638.0 |
| 120°   | 96.6  | 121.4 | 284.7 | 514.6 | 602.4 |
| 122.5° | 104.0 | 124.3 | 274.1 | 485.4 | 562.5 |
| 125°   | 108.7 | 128.0 | 261.8 | 458.1 | 530.4 |
| 127.5° | 114.0 | 133.1 | 251.5 | 431.6 | 498.1 |
| 130°   | 118.6 | 138.9 | 241.7 | 406.5 | 469.4 |
| 132.5° | 122.8 | 144.6 | 232.3 | 380.8 | 441.5 |
| 135°   | 125.5 | 149.4 | 224.2 | 355.6 | 412.2 |
| 137.5° | 129.4 | 153.7 | 216.6 | 330.2 | 382.0 |
| 140°   | 134.0 | 156.1 | 210.2 | 306.4 | 351.1 |
| 142.5° | 138.5 | 159.2 | 207.2 | 284.8 | 321.8 |
| 145°   | 141.6 | 162.8 | 206.5 | 265.4 | 297.1 |
| 147.5° | 146.6 | 165.6 | 205.4 | 248.8 | 272.8 |
| 150°   | 151.5 | 168.4 | 204.3 | 239.6 | 254.7 |
| 152.5° | 156.4 | 171.2 | 202.6 | 233.0 | 244.5 |
| 155°   | 161.0 | 173.8 | 200.5 | 226.8 | 235.7 |
| 157.5° | 164.9 | 176.0 | 198.4 | 220.7 | 227.9 |
| 160°   | 168.8 | 178.1 | 196.2 | 214.8 | 220.5 |
| 162.5° | 172.6 | 179.7 | 194.5 | 209.1 | 213.5 |
| 165°   | 175.5 | 180.8 | 192.0 | 203.6 | 206.8 |
| 167.5° | 177.9 | 181.8 | 189.9 | 198.7 | 200.5 |
| 170°   | 180.4 | 182.3 | 188.1 | 194.2 | 194.8 |
| 172.5° | 181.8 | 182.8 | 186.0 | 190.0 | 190.2 |
| 175°   | 182.8 | 183.0 | 184.6 | 186.9 | 186.4 |
| 177.5° | 183.6 | 183.2 | 183.2 | 184.6 | 183.6 |
| 180°   | 183.2 | 183.2 | 183.2 | 183.2 | 183.2 |

(END OF REPORT)