

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: P1008248

Luminaire Tested: S122DIP-B865D330UB2750-4F0-XX-W2A-F\_5000K

Issue Date: 5/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1008248  
REPORT IS A COMBINATION OF REPORTS P984801 AND P1007351  
Test Lab: INNOVATION CENTER  
Issue Date: 5/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S122DIP-B865D330UB2750-4F0-XX-W2A-F\_5000K  
Description: Define 2 Direct/Indirect Pendant with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}  
Light Source: -  
Ballast/Driver: -

**Summary**

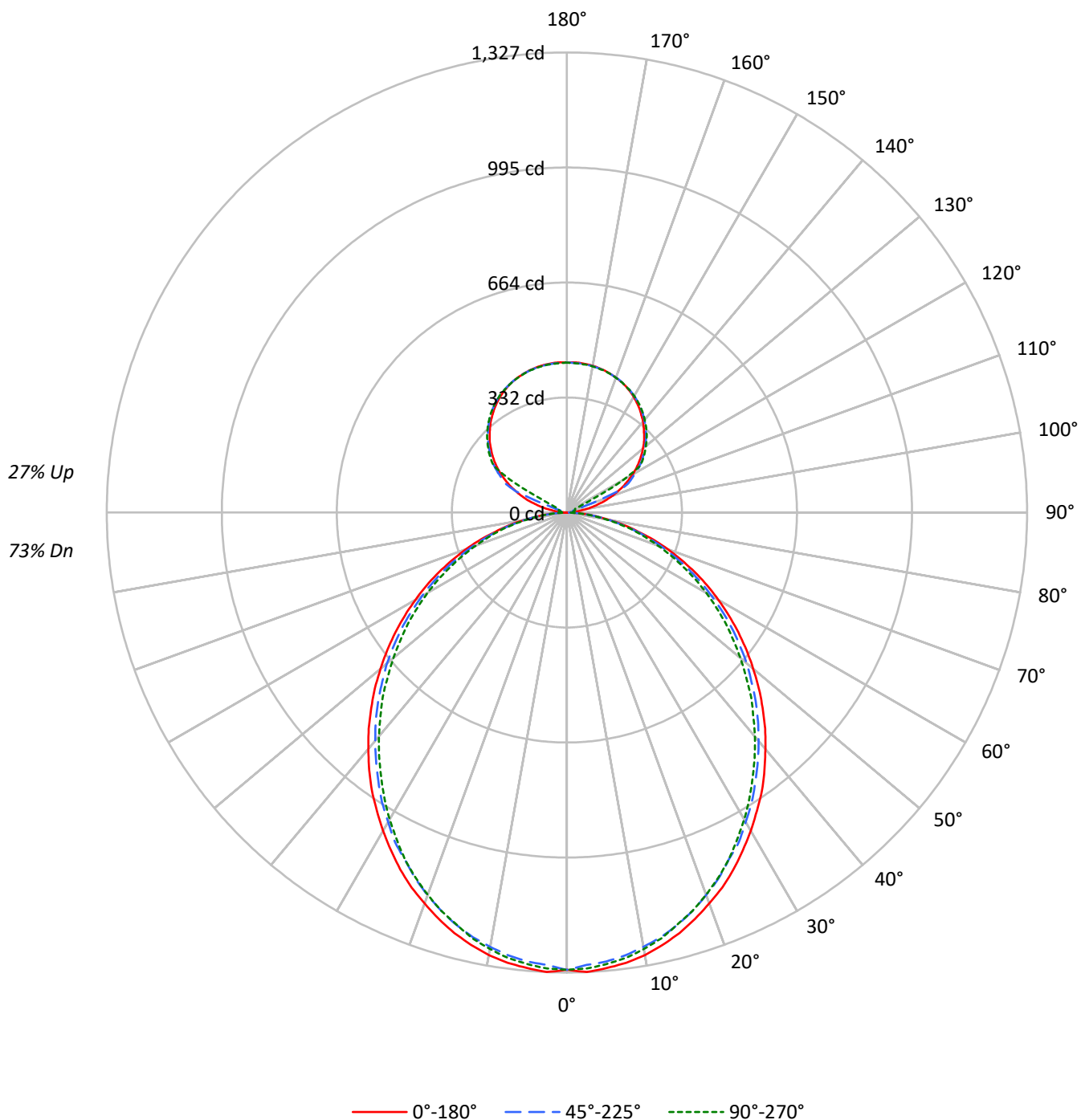
Lumens per Lamp: N/A  
Luminaire Lumens: 4624.0 lumens  
Efficiency: N/A  
Efficacy: 82.4 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.16 / 1.29  
Luminous Opening: Rectangular w/ Sides (W: 0.17' x L: 4' x H: 0.1')  
CIE Type: Semi-Direct

Input Watts (W): 56.1  
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   | 113 | 113 | 113 | 113 | 107 | 107 | 107 | 107 | 96 | 96 | 96 | 86 | 86 | 86 | 77 | 77 | 77 |
| 1   | 103 | 98  | 94  | 91  | 97  | 93  | 90  | 87  | 84 | 82 | 79 | 76 | 74 | 72 | 68 | 66 | 65 |
| 2   | 94  | 86  | 80  | 74  | 89  | 82  | 76  | 71  | 74 | 69 | 65 | 67 | 63 | 60 | 60 | 57 | 55 |
| 3   | 86  | 76  | 68  | 62  | 81  | 72  | 65  | 60  | 65 | 60 | 55 | 59 | 55 | 51 | 53 | 50 | 47 |
| 4   | 78  | 67  | 59  | 53  | 74  | 64  | 56  | 51  | 58 | 52 | 47 | 53 | 48 | 44 | 47 | 44 | 40 |
| 5   | 72  | 60  | 51  | 45  | 68  | 57  | 49  | 44  | 52 | 46 | 41 | 47 | 42 | 38 | 43 | 39 | 35 |
| 6   | 66  | 54  | 45  | 39  | 63  | 52  | 44  | 38  | 47 | 41 | 36 | 43 | 37 | 33 | 39 | 34 | 31 |
| 7   | 62  | 49  | 41  | 35  | 58  | 47  | 39  | 34  | 43 | 36 | 32 | 39 | 34 | 30 | 36 | 31 | 28 |
| 8   | 57  | 44  | 36  | 31  | 54  | 43  | 35  | 30  | 39 | 33 | 28 | 36 | 30 | 26 | 33 | 28 | 25 |
| 9   | 53  | 41  | 33  | 28  | 51  | 39  | 32  | 27  | 36 | 30 | 25 | 33 | 28 | 24 | 30 | 26 | 22 |
| 10  | 50  | 38  | 30  | 25  | 47  | 36  | 29  | 24  | 33 | 27 | 23 | 31 | 25 | 22 | 28 | 24 | 20 |

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

|     | 0°    | 45°   | 90°   |
|-----|-------|-------|-------|
| 0°  | 20880 | 20880 | 20880 |
| 5°  | 20914 | 19903 | 19762 |
| 10° | 20745 | 18996 | 18619 |
| 15° | 20441 | 18082 | 17417 |
| 20° | 20030 | 17088 | 16278 |
| 25° | 19621 | 16049 | 15141 |
| 30° | 19106 | 15074 | 13949 |
| 35° | 18619 | 14045 | 12776 |
| 40° | 18021 | 13030 | 11670 |
| 45° | 17424 | 12022 | 10584 |
| 50° | 16773 | 10997 | 9456  |
| 55° | 16086 | 9900  | 8388  |
| 60° | 15318 | 8714  | 7279  |
| 65° | 14472 | 7509  | 6113  |
| 70° | 13404 | 6188  | 4936  |
| 75° | 11921 | 4770  | 3811  |
| 80° | 10123 | 3241  | 2453  |
| 85° | 7345  | 1509  | 1044  |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 17424 cd/sqm

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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 124.1  | 2.7       |
| 10°-20°   | 349.3  | 7.6       |
| 20°-30°   | 513.3  | 11.1      |
| 30°-40°   | 596.2  | 12.9      |
| 40°-50°   | 595.5  | 12.9      |
| 50°-60°   | 519.2  | 11.2      |
| 60°-70°   | 383.8  | 8.3       |
| 70°-80°   | 217.2  | 4.7       |
| 80°-90°   | 58.1   | 1.3       |
| 90°-100°  | 14.3   | 0.3       |
| 100°-110° | 53.1   | 1.1       |
| 110°-120° | 140.9  | 3.0       |
| 120°-130° | 233.7  | 5.1       |
| 130°-140° | 248.3  | 5.4       |
| 140°-150° | 230.7  | 5.0       |
| 150°-160° | 185.5  | 4.0       |
| 160°-170° | 119.5  | 2.6       |
| 170°-180° | 41.1   | 0.9       |
| 0°-30°    | 986.8  | 21.3      |
| 0°-40°    | 1583.0 | 34.2      |
| 0°-60°    | 2697.7 | 58.3      |
| 0°-90°    | 3356.8 | 72.6      |
| 90°-120°  | 208.3  | 4.5       |
| 90°-150°  | 921.1  | 19.9      |
| 90°-180°  | 1267.0 | 27.4      |
| 0°-180°   | 4624.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|      | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|------|------|-------|------|-------|------|------|
| 0°   | 1319 | 1319  | 1319 | 1319  | 1319 |      |
| 5°   | 1319 | 1314  | 1300 | 1310  | 1308 | 125  |
| 15°  | 1256 | 1248  | 1232 | 1237  | 1230 | 354  |
| 25°  | 1136 | 1126  | 1105 | 1107  | 1105 | 523  |
| 35°  | 980  | 968   | 948  | 940   | 934  | 612  |
| 45°  | 798  | 789   | 770  | 756   | 751  | 616  |
| 55°  | 604  | 596   | 581  | 566   | 559  | 540  |
| 65°  | 407  | 400   | 387  | 375   | 369  | 403  |
| 75°  | 213  | 210   | 204  | 197   | 199  | 227  |
| 85°  | 52   | 51    | 50   | 46    | 44   | 58   |
| 90°  | 0    | 4     | 6    | 8     | 8    | 4    |
| 95°  | 20   | 10    | 12   | 14    | 13   | 24   |
| 105° | 95   | 104   | 19   | 22    | 24   | 102  |
| 115° | 180  | 185   | 193  | 48    | 26   | 177  |
| 125° | 254  | 258   | 264  | 266   | 267  | 227  |
| 135° | 315  | 320   | 322  | 326   | 325  | 243  |
| 145° | 365  | 365   | 370  | 372   | 371  | 228  |
| 155° | 402  | 399   | 403  | 405   | 402  | 185  |
| 165° | 424  | 422   | 423  | 425   | 423  | 120  |
| 175° | 433  | 431   | 432  | 434   | 431  | 41   |
| 180° | 432  | 432   | 432  | 432   | 432  |      |

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**CANDELA DISTRIBUTION (FULL):**

|        | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|--------|--------|--------|--------|--------|--------|
| 0°     | 1319.1 | 1319.1 | 1319.1 | 1319.1 | 1319.1 |
| 2.5°   | 1326.7 | 1320.4 | 1306.4 | 1319.1 | 1316.6 |
| 5°     | 1319.1 | 1314.0 | 1300.1 | 1310.2 | 1307.7 |
| 7.5°   | 1310.2 | 1302.6 | 1288.7 | 1298.8 | 1296.3 |
| 10°    | 1296.3 | 1287.4 | 1272.2 | 1282.3 | 1278.5 |
| 12.5°  | 1277.2 | 1269.6 | 1254.4 | 1260.8 | 1258.2 |
| 15°    | 1255.7 | 1248.1 | 1231.6 | 1236.7 | 1230.3 |
| 17.5°  | 1229.0 | 1221.4 | 1204.9 | 1211.3 | 1204.9 |
| 20°    | 1199.9 | 1192.3 | 1174.5 | 1178.3 | 1173.2 |
| 22.5°  | 1170.7 | 1159.3 | 1142.8 | 1142.8 | 1140.3 |
| 25°    | 1136.5 | 1126.3 | 1104.7 | 1107.3 | 1104.7 |
| 27.5°  | 1098.4 | 1089.5 | 1073.0 | 1069.2 | 1062.9 |
| 30°    | 1060.4 | 1050.2 | 1031.2 | 1027.4 | 1022.3 |
| 32.5°  | 1019.8 | 1012.2 | 991.9  | 984.3  | 979.2  |
| 35°    | 980.4  | 967.8  | 947.5  | 939.9  | 933.5  |
| 37.5°  | 936.1  | 924.6  | 904.3  | 895.5  | 889.1  |
| 40°    | 890.4  | 880.2  | 860.0  | 848.5  | 843.5  |
| 42.5°  | 846.0  | 835.9  | 815.6  | 802.9  | 795.3  |
| 45°    | 797.8  | 788.9  | 769.9  | 755.9  | 750.9  |
| 47.5°  | 750.9  | 742.0  | 721.7  | 707.7  | 700.1  |
| 50°    | 701.4  | 695.1  | 677.3  | 659.5  | 653.2  |
| 52.5°  | 653.2  | 644.3  | 627.8  | 613.9  | 605.0  |
| 55°    | 603.7  | 596.1  | 580.9  | 565.7  | 559.3  |
| 57.5°  | 554.3  | 547.9  | 531.4  | 516.2  | 511.2  |
| 60°    | 504.8  | 499.7  | 482.0  | 468.0  | 464.2  |
| 62.5°  | 456.6  | 447.7  | 435.0  | 422.4  | 417.3  |
| 65°    | 407.1  | 399.5  | 386.9  | 375.4  | 369.1  |
| 67.5°  | 356.4  | 350.1  | 338.7  | 329.8  | 324.7  |
| 70°    | 309.5  | 304.4  | 293.0  | 284.1  | 279.0  |
| 72.5°  | 261.3  | 256.2  | 249.9  | 241.0  | 237.2  |
| 75°    | 213.1  | 210.5  | 204.2  | 196.6  | 199.1  |
| 77.5°  | 170.0  | 164.9  | 162.4  | 158.5  | 154.7  |
| 80°    | 126.8  | 125.6  | 123.0  | 119.2  | 116.7  |
| 82.5°  | 86.2   | 86.2   | 85.0   | 79.9   | 79.9   |
| 85°    | 52.0   | 50.7   | 49.5   | 45.7   | 44.4   |
| 87.5°  | 22.8   | 20.3   | 17.8   | 14.0   | 12.7   |
| 90°    | 0.3    | 3.8    | 6.3    | 7.8    | 8.4    |
| 92.5°  | 7.8    | 6.6    | 7.5    | 8.1    | 8.4    |
| 95°    | 20.3   | 10.0   | 12.2   | 13.8   | 13.4   |
| 97.5°  | 36.6   | 10.9   | 16.0   | 16.9   | 17.2   |
| 100°   | 55.4   | 12.5   | 17.8   | 20.3   | 21.0   |
| 102.5° | 76.0   | 75.4   | 18.5   | 21.9   | 22.8   |
| 105°   | 95.1   | 104.5  | 19.1   | 22.5   | 23.8   |
| 107.5° | 117.3  | 125.1  | 19.7   | 23.1   | 24.4   |
| 110°   | 138.6  | 145.1  | 54.7   | 23.5   | 24.7   |



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**CANDELA DISTRIBUTION (continued):**

|        | 0°    | 22.5° | 45°   | 67.5° | 90°   |
|--------|-------|-------|-------|-------|-------|
| 112.5° | 158.6 | 164.2 | 158.9 | 24.1  | 25.0  |
| 115°   | 179.8 | 185.2 | 193.0 | 48.2  | 25.6  |
| 117.5° | 198.3 | 204.6 | 209.9 | 165.1 | 83.2  |
| 120°   | 218.9 | 223.6 | 229.3 | 233.0 | 190.8 |
| 122.5° | 236.5 | 241.5 | 247.7 | 249.6 | 249.9 |
| 125°   | 254.3 | 258.4 | 264.3 | 266.5 | 267.4 |
| 127.5° | 270.6 | 274.9 | 279.6 | 282.8 | 283.1 |
| 130°   | 285.9 | 290.9 | 294.3 | 297.8 | 297.5 |
| 132.5° | 301.5 | 305.6 | 309.0 | 311.8 | 311.5 |
| 135°   | 314.7 | 319.7 | 322.5 | 325.6 | 325.0 |
| 137.5° | 328.4 | 332.2 | 335.3 | 338.4 | 337.5 |
| 140°   | 341.9 | 344.4 | 347.8 | 350.6 | 349.1 |
| 142.5° | 353.1 | 355.3 | 359.4 | 361.9 | 360.3 |
| 145°   | 365.0 | 364.7 | 370.0 | 372.2 | 370.6 |
| 147.5° | 375.3 | 374.4 | 379.7 | 381.3 | 380.0 |
| 150°   | 385.3 | 383.2 | 388.2 | 390.0 | 388.5 |
| 152.5° | 393.8 | 391.3 | 396.0 | 397.9 | 395.7 |
| 155°   | 401.9 | 399.1 | 402.9 | 404.7 | 402.2 |
| 157.5° | 408.5 | 406.0 | 408.8 | 411.0 | 408.5 |
| 160°   | 414.1 | 412.2 | 414.1 | 416.0 | 413.8 |
| 162.5° | 419.1 | 417.2 | 418.8 | 421.0 | 418.2 |
| 165°   | 423.5 | 421.6 | 422.6 | 424.8 | 422.6 |
| 167.5° | 426.9 | 425.1 | 426.0 | 428.2 | 425.4 |
| 170°   | 429.8 | 427.9 | 428.5 | 430.7 | 427.9 |
| 172.5° | 431.6 | 429.8 | 430.4 | 432.6 | 429.8 |
| 175°   | 433.2 | 431.0 | 431.6 | 433.8 | 430.7 |
| 177.5° | 433.8 | 431.6 | 431.9 | 434.1 | 431.3 |
| 180°   | 432.3 | 432.3 | 432.3 | 432.3 | 432.3 |

(END OF REPORT)