

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: P1008593

Luminaire Tested: S122DIP-B1005D330UB27-4F0-XX-W2A-F1

Issue Date: 5/6/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1008593  
REPORT IS A COMBINATION OF REPORTS P983585 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-F1  
Description: Define 2 Direct/Indirect Pendant with 2700K BioUP LEDs {m-DER=0.473} {m-EER=0.52}  
Light Source: -  
Ballast/Driver: -

**Summary**

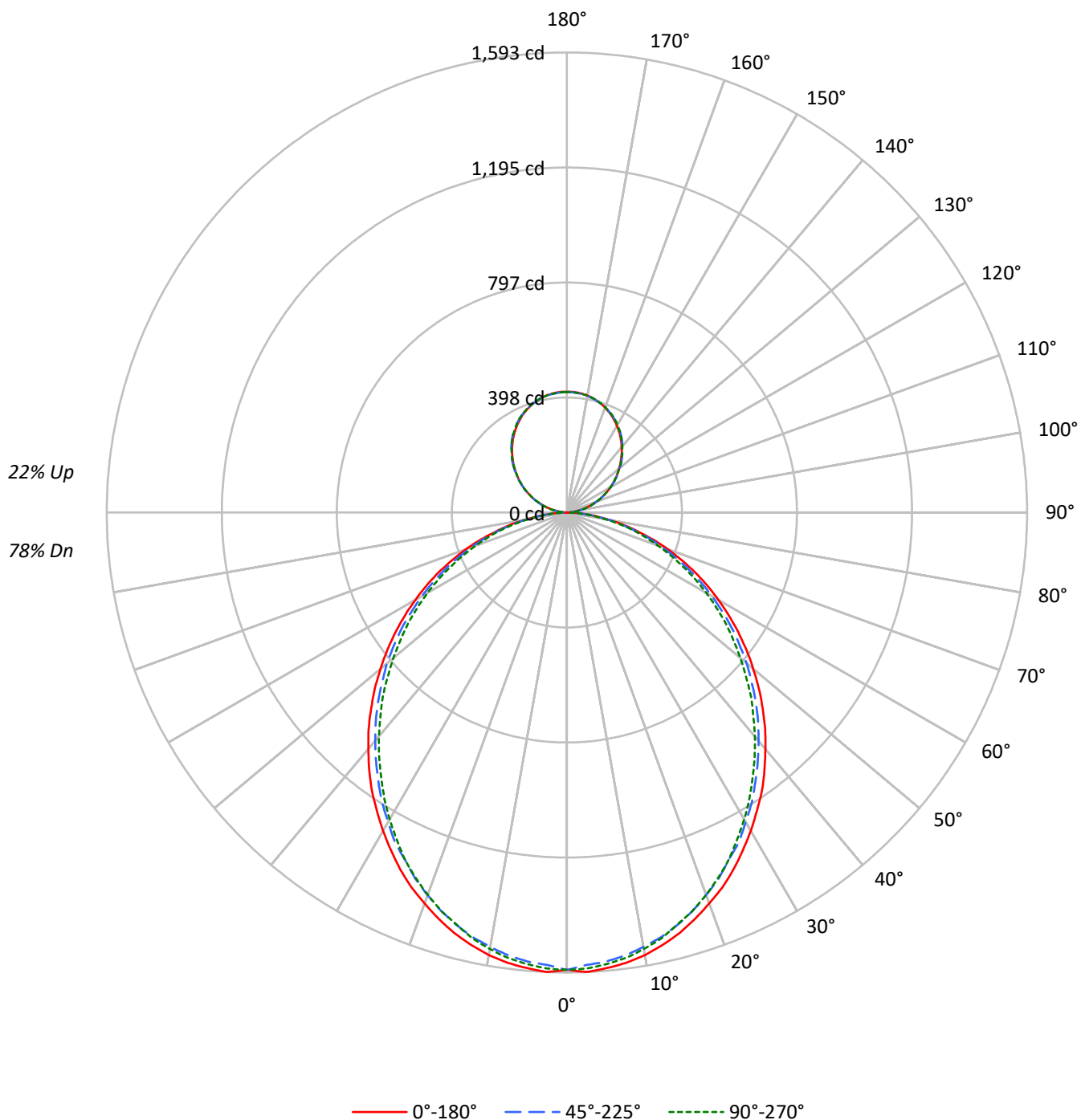
Lumens per Lamp: N/A  
Luminaire Lumens: 5198.0 lumens  
Efficiency: N/A  
Efficacy: 73.6 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.16 / 1.29  
Luminous Opening: Rectangular w/ Sides (W: 0.17' x L: 4' x H: 0.1')  
CIE Type: Semi-Direct

Input Watts (W): 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 | 50 | 30 | 10 |
| RCR |     |     |     |     |     |     |     |     |    |    |    |    |    |    |    |    |    |    |    |    |
| 0   | 114 | 114 | 114 | 114 | 108 | 108 | 108 | 108 | 99 | 99 | 99 | 90 | 90 | 90 | 81 | 81 | 81 |    |    | 78 |
| 1   | 104 | 99  | 95  | 92  | 99  | 95  | 91  | 88  | 87 | 84 | 81 | 79 | 77 | 75 | 72 | 70 | 69 |    |    | 65 |
| 2   | 95  | 87  | 80  | 75  | 90  | 83  | 77  | 72  | 76 | 71 | 67 | 69 | 66 | 63 | 63 | 61 | 58 |    |    | 55 |
| 3   | 86  | 76  | 69  | 63  | 82  | 73  | 66  | 61  | 67 | 61 | 57 | 61 | 57 | 53 | 56 | 53 | 49 |    |    | 46 |
| 4   | 79  | 68  | 60  | 53  | 75  | 65  | 57  | 52  | 60 | 53 | 49 | 55 | 50 | 46 | 50 | 46 | 43 |    |    | 40 |
| 5   | 73  | 61  | 52  | 46  | 69  | 58  | 50  | 45  | 54 | 47 | 42 | 49 | 44 | 40 | 45 | 41 | 37 |    |    | 35 |
| 6   | 67  | 55  | 46  | 40  | 64  | 52  | 45  | 39  | 48 | 42 | 37 | 45 | 39 | 35 | 41 | 36 | 33 |    |    | 30 |
| 7   | 62  | 49  | 41  | 35  | 59  | 48  | 40  | 34  | 44 | 37 | 33 | 41 | 35 | 31 | 38 | 33 | 29 |    |    | 27 |
| 8   | 58  | 45  | 37  | 31  | 55  | 43  | 36  | 31  | 40 | 34 | 29 | 37 | 32 | 28 | 35 | 30 | 26 |    |    | 24 |
| 9   | 54  | 41  | 33  | 28  | 52  | 40  | 33  | 28  | 37 | 31 | 26 | 34 | 29 | 25 | 32 | 27 | 24 |    |    | 22 |
| 10  | 51  | 38  | 31  | 25  | 48  | 37  | 30  | 25  | 34 | 28 | 24 | 32 | 27 | 23 | 30 | 25 | 22 |    |    | 20 |

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

|     | 0°    | 45°   | 90°   |
|-----|-------|-------|-------|
| 0°  | 25067 | 25067 | 25067 |
| 5°  | 25108 | 23894 | 23724 |
| 10° | 24904 | 22805 | 22353 |
| 15° | 24540 | 21709 | 20909 |
| 20° | 24047 | 20514 | 19542 |
| 25° | 23556 | 19269 | 18178 |
| 30° | 22937 | 18098 | 16746 |
| 35° | 22355 | 16861 | 15339 |
| 40° | 21634 | 15642 | 14009 |
| 45° | 20918 | 14433 | 12705 |
| 50° | 20138 | 13201 | 11353 |
| 55° | 19313 | 11886 | 10071 |
| 60° | 18389 | 10461 | 8739  |
| 65° | 17377 | 9013  | 7339  |
| 70° | 16089 | 7428  | 5926  |
| 75° | 14310 | 5728  | 4576  |
| 80° | 12159 | 3892  | 2945  |
| 85° | 8814  | 1811  | 1253  |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 20918 cd/sqm

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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 149.0  | 2.9       |
| 10°-20°   | 419.4  | 8.1       |
| 20°-30°   | 616.3  | 11.9      |
| 30°-40°   | 715.8  | 13.8      |
| 40°-50°   | 714.9  | 13.8      |
| 50°-60°   | 623.3  | 12.0      |
| 60°-70°   | 460.8  | 8.9       |
| 70°-80°   | 260.7  | 5.0       |
| 80°-90°   | 70.0   | 1.3       |
| 90°-100°  | 25.8   | 0.5       |
| 100°-110° | 82.1   | 1.6       |
| 110°-120° | 140.6  | 2.7       |
| 120°-130° | 184.8  | 3.6       |
| 130°-140° | 207.5  | 4.0       |
| 140°-150° | 203.5  | 3.9       |
| 150°-160° | 170.7  | 3.3       |
| 160°-170° | 113.2  | 2.2       |
| 170°-180° | 39.6   | 0.8       |
| 0°-30°    | 1184.7 | 22.8      |
| 0°-40°    | 1900.5 | 36.6      |
| 0°-60°    | 3238.7 | 62.3      |
| 0°-90°    | 4030.2 | 77.5      |
| 90°-120°  | 248.5  | 4.8       |
| 90°-150°  | 844.4  | 16.2      |
| 90°-180°  | 1168.0 | 22.5      |
| 0°-180°   | 5198.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|      | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|------|------|-------|------|-------|------|------|
| 0°   | 1584 | 1584  | 1584 | 1584  | 1584 |      |
| 5°   | 1584 | 1578  | 1561 | 1573  | 1570 | 150  |
| 15°  | 1508 | 1498  | 1479 | 1485  | 1477 | 425  |
| 25°  | 1364 | 1352  | 1326 | 1329  | 1326 | 628  |
| 35°  | 1177 | 1162  | 1138 | 1128  | 1121 | 735  |
| 45°  | 958  | 947   | 924  | 908   | 901  | 739  |
| 55°  | 725  | 716   | 697  | 679   | 672  | 648  |
| 65°  | 489  | 480   | 464  | 451   | 443  | 483  |
| 75°  | 256  | 253   | 245  | 236   | 239  | 273  |
| 85°  | 62   | 61    | 59   | 55    | 53   | 70   |
| 90°  | 0    | 5     | 12   | 12    | 12   | 5    |
| 95°  | 18   | 22    | 23   | 23    | 22   | 20   |
| 105° | 76   | 77    | 78   | 78    | 78   | 80   |
| 115° | 141  | 143   | 142  | 142   | 141  | 139  |
| 125° | 205  | 208   | 207  | 206   | 206  | 183  |
| 135° | 265  | 269   | 270  | 270   | 269  | 205  |
| 145° | 322  | 325   | 327  | 327   | 326  | 201  |
| 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°     | 1583.6 | 1583.6 | 1583.6 | 1583.6 | 1583.6 |
| 2.5°   | 1592.8 | 1585.1 | 1568.4 | 1583.6 | 1580.6 |
| 5°     | 1583.6 | 1577.5 | 1560.8 | 1573.0 | 1569.9 |
| 7.5°   | 1573.0 | 1563.8 | 1547.1 | 1559.3 | 1556.2 |
| 10°    | 1556.2 | 1545.6 | 1527.3 | 1539.5 | 1534.9 |
| 12.5°  | 1533.4 | 1524.2 | 1506.0 | 1513.6 | 1510.5 |
| 15°    | 1507.5 | 1498.4 | 1478.6 | 1484.7 | 1477.0 |
| 17.5°  | 1475.5 | 1466.4 | 1446.6 | 1454.2 | 1446.6 |
| 20°    | 1440.5 | 1431.4 | 1410.0 | 1414.6 | 1408.5 |
| 22.5°  | 1405.5 | 1391.8 | 1372.0 | 1372.0 | 1368.9 |
| 25°    | 1364.4 | 1352.2 | 1326.3 | 1329.3 | 1326.3 |
| 27.5°  | 1318.7 | 1308.0 | 1288.2 | 1283.7 | 1276.0 |
| 30°    | 1273.0 | 1260.8 | 1238.0 | 1233.4 | 1227.3 |
| 32.5°  | 1224.3 | 1215.1 | 1190.8 | 1181.6 | 1175.5 |
| 35°    | 1177.1 | 1161.8 | 1137.5 | 1128.3 | 1120.7 |
| 37.5°  | 1123.8 | 1110.1 | 1085.7 | 1075.0 | 1067.4 |
| 40°    | 1068.9 | 1056.8 | 1032.4 | 1018.7 | 1012.6 |
| 42.5°  | 1015.7 | 1003.5 | 979.1  | 963.9  | 954.7  |
| 45°    | 957.8  | 947.1  | 924.3  | 907.5  | 901.4  |
| 47.5°  | 901.4  | 890.8  | 866.4  | 849.7  | 840.5  |
| 50°    | 842.1  | 834.4  | 813.1  | 791.8  | 784.2  |
| 52.5°  | 784.2  | 773.5  | 753.7  | 737.0  | 726.3  |
| 55°    | 724.8  | 715.7  | 697.4  | 679.1  | 671.5  |
| 57.5°  | 665.4  | 657.8  | 638.0  | 619.7  | 613.7  |
| 60°    | 606.0  | 600.0  | 578.6  | 561.9  | 557.3  |
| 62.5°  | 548.2  | 537.5  | 522.3  | 507.1  | 501.0  |
| 65°    | 488.8  | 479.7  | 464.4  | 450.7  | 443.1  |
| 67.5°  | 427.9  | 420.3  | 406.6  | 395.9  | 389.8  |
| 70°    | 371.5  | 365.5  | 351.7  | 341.1  | 335.0  |
| 72.5°  | 313.7  | 307.6  | 300.0  | 289.3  | 284.7  |
| 75°    | 255.8  | 252.8  | 245.2  | 236.0  | 239.1  |
| 77.5°  | 204.0  | 198.0  | 194.9  | 190.3  | 185.8  |
| 80°    | 152.3  | 150.7  | 147.7  | 143.1  | 140.1  |
| 82.5°  | 103.5  | 103.5  | 102.0  | 95.9   | 95.9   |
| 85°    | 62.4   | 60.9   | 59.4   | 54.8   | 53.3   |
| 87.5°  | 27.4   | 24.4   | 21.3   | 16.7   | 15.2   |
| 90°    | 0.4    | 4.6    | 12.3   | 11.6   | 12.0   |
| 92.5°  | 7.8    | 10.6   | 10.9   | 11.3   | 11.3   |
| 95°    | 18.3   | 21.9   | 22.6   | 22.6   | 21.9   |
| 97.5°  | 30.7   | 33.8   | 35.2   | 35.2   | 35.2   |
| 100°   | 44.8   | 47.6   | 48.6   | 48.6   | 48.3   |
| 102.5° | 59.6   | 61.7   | 63.1   | 63.4   | 63.1   |
| 105°   | 75.8   | 76.8   | 77.5   | 78.3   | 78.3   |
| 107.5° | 92.0   | 93.4   | 93.4   | 93.8   | 92.0   |
| 110°   | 107.5  | 109.6  | 109.6  | 109.6  | 108.6  |

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**CANDELA DISTRIBUTION (continued):**

|        | 0°    | 22.5° | 45°   | 67.5° | 90°   |
|--------|-------|-------|-------|-------|-------|
| 112.5° | 124.4 | 126.5 | 126.2 | 125.1 | 124.4 |
| 115°   | 141.0 | 143.1 | 142.4 | 142.1 | 141.0 |
| 117.5° | 157.6 | 160.4 | 158.6 | 157.6 | 156.5 |
| 120°   | 174.1 | 176.9 | 174.1 | 174.1 | 173.1 |
| 122.5° | 189.3 | 192.8 | 191.0 | 190.0 | 189.3 |
| 125°   | 205.1 | 208.3 | 207.3 | 206.2 | 205.9 |
| 127.5° | 220.7 | 224.5 | 223.1 | 221.7 | 220.7 |
| 130°   | 235.1 | 239.7 | 239.0 | 238.3 | 236.9 |
| 132.5° | 251.3 | 254.9 | 255.2 | 253.4 | 252.4 |
| 135°   | 265.4 | 269.3 | 270.0 | 269.7 | 268.6 |
| 137.5° | 280.9 | 284.1 | 284.8 | 284.5 | 283.0 |
| 140°   | 294.7 | 297.9 | 299.6 | 299.6 | 298.2 |
| 142.5° | 308.8 | 312.0 | 313.0 | 313.4 | 312.0 |
| 145°   | 322.2 | 324.6 | 326.8 | 327.1 | 325.7 |
| 147.5° | 334.2 | 337.3 | 338.7 | 339.4 | 338.0 |
| 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)