

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: P1011150

Luminaire Tested: S123DIP-B1000D365UB50-4F0-XX-W2A-D4

Issue Date: 5/6/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1011150  
REPORT IS A COMBINATION OF REPORTS P989195 AND P1007351  
Test Lab: INNOVATION CENTER  
Issue Date: 5/6/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S123DIP-B1000D365UB50-4F0-XX-W2A-D4  
Description: Define 3 Direct/Indirect Pendant with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}  
Light Source: -  
Ballast/Driver: -

**Summary**

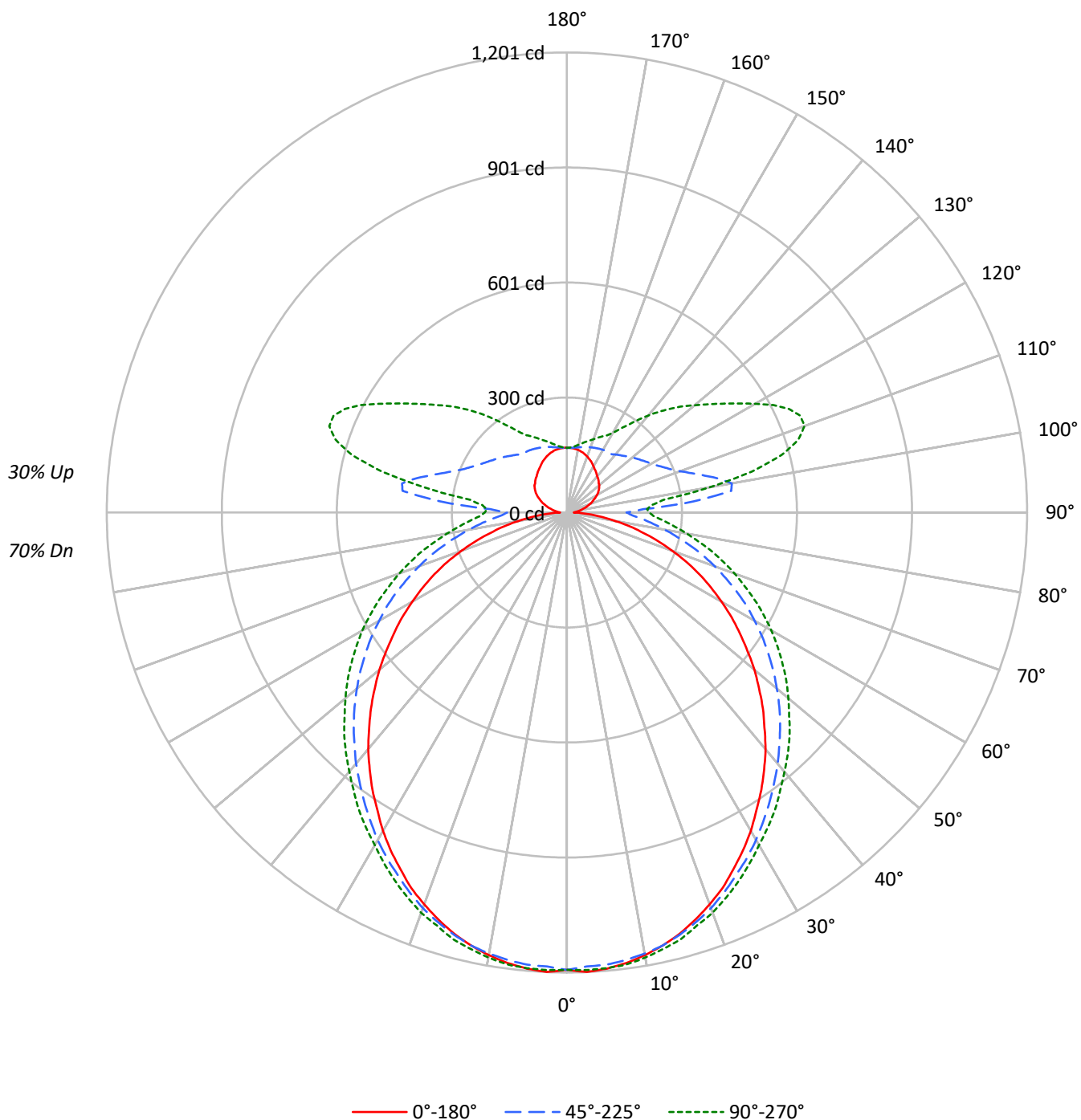
Lumens per Lamp: N/A  
Luminaire Lumens: 5286.9 lumens  
Efficiency: N/A  
Efficacy: 94.2 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.25 / 1.37  
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')  
CIE Type: Semi-Direct

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

TEST NUMBER: P1011150

CATALOG NUMBER: S123DIP-B1000D365UB50-4F0-XX-W2A-D4

### Luminous Intensity Polar Plot



TEST NUMBER: P1011150

CATALOG NUMBER: S123DIP-B1000D365UB50-4F0-XX-W2A-D4

**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 | 106 | 106 | 106 | 106 | 94 | 94 | 94 | 84 | 84 | 84 | 74 | 74 | 74 |
| 1   | 101 | 96  | 91  | 87  | 95  | 90  | 86  | 83  | 81 | 77 | 75 | 72 | 69 | 67 | 63 | 61 | 60 |
| 2   | 91  | 83  | 76  | 70  | 86  | 78  | 72  | 67  | 70 | 65 | 61 | 62 | 58 | 55 | 55 | 52 | 49 |
| 3   | 83  | 72  | 64  | 58  | 78  | 68  | 61  | 55  | 61 | 55 | 50 | 54 | 50 | 46 | 48 | 44 | 41 |
| 4   | 76  | 64  | 55  | 48  | 71  | 60  | 53  | 46  | 54 | 48 | 43 | 48 | 43 | 39 | 43 | 39 | 35 |
| 5   | 69  | 57  | 48  | 41  | 65  | 54  | 46  | 40  | 48 | 42 | 37 | 43 | 38 | 33 | 38 | 34 | 30 |
| 6   | 64  | 51  | 42  | 36  | 60  | 48  | 40  | 35  | 44 | 37 | 32 | 39 | 33 | 29 | 35 | 30 | 27 |
| 7   | 59  | 46  | 37  | 31  | 56  | 44  | 36  | 30  | 39 | 33 | 28 | 35 | 30 | 26 | 32 | 27 | 24 |
| 8   | 55  | 42  | 34  | 28  | 52  | 40  | 32  | 27  | 36 | 30 | 25 | 32 | 27 | 23 | 29 | 25 | 21 |
| 9   | 51  | 38  | 30  | 25  | 48  | 36  | 29  | 24  | 33 | 27 | 22 | 30 | 25 | 21 | 27 | 22 | 19 |
| 10  | 48  | 35  | 27  | 22  | 45  | 34  | 26  | 22  | 30 | 24 | 20 | 28 | 22 | 19 | 25 | 20 | 17 |

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

|     | 0°    | 45°   | 90°   |
|-----|-------|-------|-------|
| 0°  | 12853 | 12853 | 12853 |
| 5°  | 12888 | 12476 | 12466 |
| 10° | 12768 | 12138 | 12046 |
| 15° | 12598 | 11764 | 11599 |
| 20° | 12358 | 11349 | 11120 |
| 25° | 12064 | 10880 | 10624 |
| 30° | 11761 | 10457 | 10127 |
| 35° | 11423 | 10011 | 9720  |
| 40° | 11100 | 9605  | 9292  |
| 45° | 10740 | 9211  | 8939  |
| 50° | 10386 | 8821  | 8555  |
| 55° | 9993  | 8421  | 8203  |
| 60° | 9609  | 8011  | 7840  |
| 65° | 9213  | 7575  | 7418  |
| 70° | 8620  | 7085  | 6983  |
| 75° | 7867  | 6528  | 6532  |
| 80° | 6993  | 5962  | 6019  |
| 85° | 6119  | 5505  | 5650  |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 10740 cd/sqm

TEST NUMBER: P1011150

CATALOG NUMBER: S123DIP-B1000D365UB50-4F0-XX-W2A-D4

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 113.3  | 2.1       |
| 10°-20°   | 322.9  | 6.1       |
| 20°-30°   | 482.9  | 9.1       |
| 30°-40°   | 576.5  | 10.9      |
| 40°-50°   | 603.2  | 11.4      |
| 50°-60°   | 566.1  | 10.7      |
| 60°-70°   | 472.8  | 8.9       |
| 70°-80°   | 338.1  | 6.4       |
| 80°-90°   | 202.1  | 3.8       |
| 90°-100°  | 222.4  | 4.2       |
| 100°-110° | 361.1  | 6.8       |
| 110°-120° | 323.5  | 6.1       |
| 120°-130° | 243.6  | 4.6       |
| 130°-140° | 180.2  | 3.4       |
| 140°-150° | 125.9  | 2.4       |
| 150°-160° | 85.6   | 1.6       |
| 160°-170° | 50.3   | 1.0       |
| 170°-180° | 16.3   | 0.3       |
| 0°-30°    | 919.1  | 17.4      |
| 0°-40°    | 1495.6 | 28.3      |
| 0°-60°    | 2664.9 | 50.4      |
| 0°-90°    | 3677.9 | 69.6      |
| 90°-120°  | 907.0  | 17.2      |
| 90°-150°  | 1456.8 | 27.6      |
| 90°-180°  | 1609.0 | 30.4      |
| 0°-180°   | 5286.9 | 100.0     |

**CANDELA DISTRIBUTION:**

|      | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|------|------|-------|------|-------|------|------|
| 0°   | 1194 | 1194  | 1194 | 1194  | 1194 |      |
| 5°   | 1195 | 1193  | 1185 | 1195  | 1194 | 113  |
| 15°  | 1138 | 1142  | 1141 | 1154  | 1152 | 321  |
| 25°  | 1028 | 1041  | 1044 | 1061  | 1061 | 474  |
| 35°  | 884  | 905   | 922  | 942   | 947  | 553  |
| 45°  | 723  | 754   | 787  | 812   | 822  | 558  |
| 55°  | 552  | 594   | 641  | 676   | 687  | 494  |
| 65°  | 381  | 432   | 489  | 528   | 541  | 377  |
| 75°  | 207  | 268   | 333  | 376   | 392  | 221  |
| 85°  | 64   | 129   | 198  | 242   | 255  | 66   |
| 90°  | 18   | 85    | 156  | 201   | 214  | 13   |
| 95°  | 26   | 103   | 332  | 228   | 222  | 23   |
| 105° | 50   | 100   | 372  | 615   | 580  | 53   |
| 115° | 77   | 109   | 279  | 561   | 639  | 76   |
| 125° | 101  | 119   | 238  | 424   | 495  | 90   |
| 135° | 117  | 138   | 209  | 332   | 384  | 90   |
| 145° | 132  | 149   | 191  | 251   | 280  | 82   |
| 155° | 148  | 160   | 185  | 210   | 219  | 68   |
| 165° | 162  | 166   | 177  | 188   | 191  | 46   |
| 175° | 168  | 169   | 170  | 172   | 172  | 16   |
| 180° | 169  | 169   | 169  | 169   | 169  |      |

TEST NUMBER: P1011150

CATALOG NUMBER: S123DIP-B1000D365UB50-4F0-XX-W2A-D4

**CANDELA DISTRIBUTION (FULL):**

|        | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|--------|--------|--------|--------|--------|--------|
| 0°     | 1194.1 | 1194.1 | 1194.1 | 1194.1 | 1194.1 |
| 2.5°   | 1200.6 | 1196.7 | 1186.3 | 1196.7 | 1195.4 |
| 5°     | 1195.4 | 1192.8 | 1185.0 | 1195.4 | 1194.1 |
| 7.5°   | 1186.3 | 1186.3 | 1178.5 | 1191.5 | 1190.2 |
| 10°    | 1173.3 | 1175.9 | 1169.4 | 1182.4 | 1179.8 |
| 12.5°  | 1157.6 | 1161.5 | 1157.6 | 1169.4 | 1166.8 |
| 15°    | 1138.1 | 1142.0 | 1140.7 | 1153.7 | 1152.4 |
| 17.5°  | 1114.7 | 1122.5 | 1121.2 | 1132.9 | 1130.3 |
| 20°    | 1088.7 | 1096.5 | 1099.1 | 1110.8 | 1112.1 |
| 22.5°  | 1061.4 | 1069.2 | 1073.1 | 1088.7 | 1087.4 |
| 25°    | 1027.6 | 1040.6 | 1044.5 | 1061.4 | 1061.4 |
| 27.5°  | 995.1  | 1009.4 | 1017.2 | 1031.5 | 1032.8 |
| 30°    | 959.9  | 976.8  | 987.3  | 1002.9 | 1002.9 |
| 32.5°  | 920.9  | 940.4  | 954.7  | 971.6  | 975.5  |
| 35°    | 884.5  | 905.3  | 922.2  | 941.7  | 946.9  |
| 37.5°  | 845.5  | 868.9  | 888.4  | 910.5  | 914.4  |
| 40°    | 806.5  | 829.9  | 855.9  | 878.0  | 883.2  |
| 42.5°  | 763.5  | 793.4  | 820.8  | 845.5  | 853.3  |
| 45°    | 723.2  | 754.4  | 786.9  | 811.7  | 822.1  |
| 47.5°  | 680.3  | 715.4  | 751.8  | 779.1  | 786.9  |
| 50°    | 638.7  | 675.1  | 715.4  | 745.3  | 754.4  |
| 52.5°  | 594.4  | 633.5  | 679.0  | 710.2  | 721.9  |
| 55°    | 551.5  | 594.4  | 641.3  | 676.4  | 686.8  |
| 57.5°  | 509.9  | 554.1  | 604.8  | 640.0  | 651.7  |
| 60°    | 465.7  | 512.5  | 565.8  | 602.2  | 616.5  |
| 62.5°  | 424.0  | 472.2  | 529.4  | 565.8  | 578.8  |
| 65°    | 381.1  | 431.8  | 489.1  | 528.1  | 541.1  |
| 67.5°  | 338.2  | 391.5  | 448.8  | 491.7  | 502.1  |
| 70°    | 292.7  | 348.6  | 411.0  | 452.7  | 465.7  |
| 72.5°  | 251.0  | 307.0  | 372.0  | 414.9  | 427.9  |
| 75°    | 206.8  | 267.9  | 333.0  | 375.9  | 391.5  |
| 77.5°  | 169.1  | 230.2  | 295.3  | 340.8  | 352.5  |
| 80°    | 128.8  | 192.5  | 260.1  | 304.4  | 317.4  |
| 82.5°  | 93.7   | 158.7  | 227.6  | 271.9  | 284.9  |
| 85°    | 63.7   | 128.8  | 197.7  | 241.9  | 254.9  |
| 87.5°  | 39.0   | 104.1  | 170.4  | 214.6  | 227.6  |
| 90°    | 17.6   | 84.7   | 155.5  | 200.8  | 214.1  |
| 92.5°  | 20.7   | 92.0   | 200.2  | 201.2  | 209.3  |
| 95°    | 25.9   | 102.8  | 331.5  | 228.2  | 221.7  |
| 97.5°  | 31.5   | 103.0  | 432.7  | 308.7  | 254.3  |
| 100°   | 37.0   | 100.9  | 436.9  | 462.0  | 378.2  |
| 102.5° | 42.9   | 99.6   | 406.9  | 558.2  | 494.2  |
| 105°   | 50.0   | 100.2  | 372.4  | 614.6  | 580.5  |
| 107.5° | 56.3   | 101.8  | 341.0  | 633.6  | 633.6  |
| 110°   | 63.2   | 103.6  | 314.9  | 626.7  | 660.0  |



TEST NUMBER: P1011150

CATALOG NUMBER: S123DIP-B1000D365UB50-4F0-XX-W2A-D4

**CANDELA DISTRIBUTION (continued):**

|        | 0°    | 22.5° | 45°   | 67.5° | 90°   |
|--------|-------|-------|-------|-------|-------|
| 112.5° | 70.7  | 105.8 | 294.1 | 598.3 | 659.4 |
| 115°   | 76.6  | 109.4 | 279.1 | 561.1 | 639.3 |
| 117.5° | 83.7  | 111.4 | 265.5 | 521.8 | 607.6 |
| 120°   | 90.0  | 113.4 | 255.2 | 484.2 | 567.1 |
| 122.5° | 96.5  | 116.3 | 246.3 | 453.0 | 529.8 |
| 125°   | 101.3 | 118.9 | 237.8 | 424.4 | 495.0 |
| 127.5° | 106.1 | 123.8 | 230.3 | 399.5 | 463.9 |
| 130°   | 110.5 | 129.2 | 222.7 | 376.0 | 435.7 |
| 132.5° | 112.7 | 134.2 | 215.9 | 353.4 | 410.4 |
| 135°   | 116.8 | 137.5 | 209.1 | 331.8 | 383.5 |
| 137.5° | 120.5 | 141.2 | 203.2 | 309.6 | 356.9 |
| 140°   | 123.0 | 144.7 | 197.6 | 289.0 | 330.6 |
| 142.5° | 127.1 | 146.4 | 191.7 | 268.4 | 304.4 |
| 145°   | 131.5 | 149.2 | 191.1 | 250.6 | 279.8 |
| 147.5° | 134.7 | 152.1 | 190.0 | 235.1 | 258.9 |
| 150°   | 139.1 | 154.5 | 188.7 | 223.4 | 240.1 |
| 152.5° | 143.6 | 157.0 | 187.0 | 216.6 | 227.3 |
| 155°   | 148.0 | 159.6 | 184.9 | 210.2 | 219.1 |
| 157.5° | 151.4 | 161.8 | 183.2 | 204.0 | 211.2 |
| 160°   | 155.5 | 163.7 | 181.1 | 198.4 | 203.7 |
| 162.5° | 158.6 | 165.1 | 179.1 | 193.1 | 196.9 |
| 165°   | 161.7 | 166.3 | 177.0 | 187.8 | 191.1 |
| 167.5° | 164.1 | 167.4 | 175.0 | 183.2 | 185.3 |
| 170°   | 166.1 | 167.8 | 172.9 | 179.1 | 180.1 |
| 172.5° | 167.5 | 168.4 | 171.2 | 175.5 | 175.3 |
| 175°   | 168.5 | 168.6 | 169.9 | 172.3 | 171.9 |
| 177.5° | 169.2 | 168.8 | 168.8 | 170.2 | 169.5 |
| 180°   | 168.8 | 168.8 | 168.8 | 168.8 | 168.8 |

(END OF REPORT)