

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: P1011004

Luminaire Tested: S123RDIP-B775D585UB2750-4F0-XX-W2A-F\_2700K

Issue Date: 5/6/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1011004  
REPORT IS A COMBINATION OF REPORTS P993650 AND P1007351  
Test Lab: INNOVATION CENTER  
Issue Date: 5/6/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S123RDIP-B775D585UB2750-4F0-XX-W2A-F\_2700K  
Description: Define 3 Regressed Direct/Indirect Pendant with 2700K BioUP LEDs {m-DER=0.473}  
{m-EER=0.52}  
Light Source: -  
Ballast/Driver: -

**Summary**

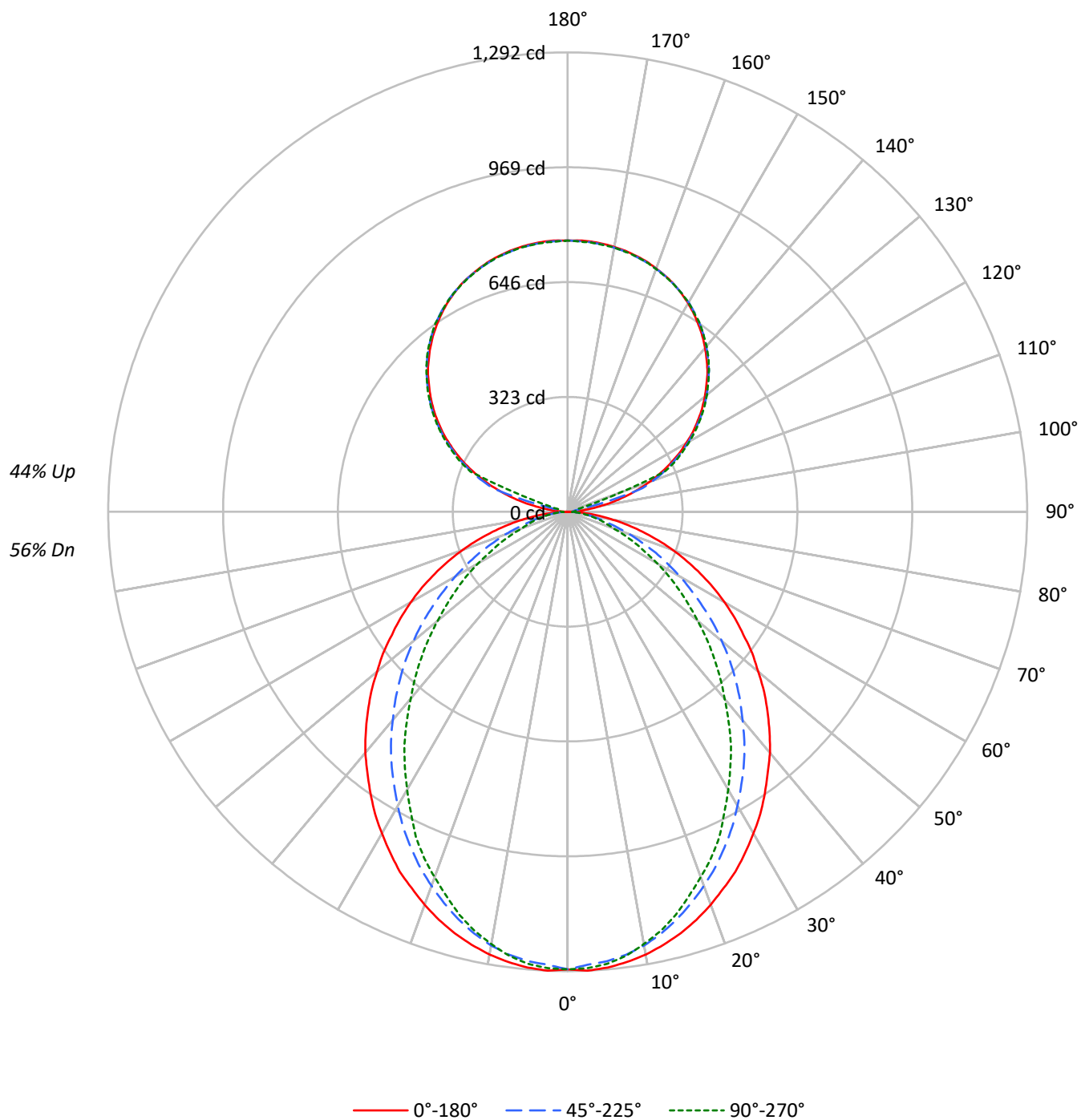
Lumens per Lamp: N/A  
Luminaire Lumens: 5234.0 lumens  
Efficiency: N/A  
Efficacy: 102.0 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.07 / 1.22  
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')  
CIE Type: General Diffuse

Input Watts (W): 51.3  
Input Voltage (V): 120  
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   | 108 | 108 | 108 | 108 | 101 | 101 | 101 | 101 | 86 | 86 | 86 | 73 | 73 | 73 | 61 | 61 | 61 |    |    | 56 |
| 1   | 99  | 95  | 91  | 88  | 92  | 89  | 85  | 82  | 76 | 74 | 72 | 65 | 63 | 62 | 55 | 54 | 52 |    |    | 48 |
| 2   | 91  | 84  | 78  | 72  | 84  | 78  | 73  | 68  | 67 | 63 | 60 | 58 | 55 | 52 | 49 | 47 | 45 |    |    | 40 |
| 3   | 83  | 74  | 67  | 61  | 77  | 69  | 63  | 57  | 60 | 55 | 51 | 51 | 48 | 45 | 43 | 41 | 38 |    |    | 35 |
| 4   | 76  | 66  | 58  | 52  | 71  | 61  | 54  | 49  | 53 | 48 | 44 | 46 | 42 | 38 | 39 | 36 | 33 |    |    | 30 |
| 5   | 70  | 59  | 51  | 45  | 65  | 55  | 48  | 42  | 48 | 42 | 38 | 41 | 37 | 34 | 35 | 32 | 29 |    |    | 26 |
| 6   | 65  | 53  | 45  | 39  | 60  | 49  | 42  | 37  | 43 | 38 | 33 | 37 | 33 | 30 | 32 | 29 | 26 |    |    | 23 |
| 7   | 60  | 48  | 40  | 34  | 56  | 45  | 38  | 33  | 39 | 34 | 29 | 34 | 30 | 26 | 29 | 26 | 23 |    |    | 21 |
| 8   | 56  | 43  | 36  | 30  | 52  | 41  | 34  | 29  | 36 | 30 | 26 | 31 | 27 | 24 | 27 | 24 | 21 |    |    | 19 |
| 9   | 52  | 40  | 32  | 27  | 48  | 37  | 31  | 26  | 33 | 28 | 24 | 29 | 24 | 21 | 25 | 22 | 19 |    |    | 17 |
| 10  | 49  | 37  | 29  | 25  | 45  | 34  | 28  | 23  | 31 | 25 | 21 | 27 | 22 | 19 | 23 | 20 | 17 |    |    | 15 |

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

|     | 0°    | 45°   | 90°   |
|-----|-------|-------|-------|
| 0°  | 13851 | 13851 | 13851 |
| 5°  | 13874 | 13360 | 13324 |
| 10° | 13764 | 12858 | 12605 |
| 15° | 13586 | 12238 | 11816 |
| 20° | 13350 | 11562 | 10936 |
| 25° | 13109 | 10861 | 10102 |
| 30° | 12799 | 10114 | 9115  |
| 35° | 12480 | 9381  | 8216  |
| 40° | 12180 | 8585  | 7224  |
| 45° | 11795 | 7806  | 6331  |
| 50° | 11370 | 6974  | 5408  |
| 55° | 10930 | 6085  | 4562  |
| 60° | 10509 | 5172  | 3703  |
| 65° | 9964  | 4234  | 2890  |
| 70° | 9282  | 3203  | 2066  |
| 75° | 8296  | 2168  | 1637  |
| 80° | 7079  | 1506  | 1147  |
| 85° | 5312  | 813   | 601   |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 11795 cd/sqm

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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 121.0  | 2.3       |
| 10°-20°   | 336.5  | 6.4       |
| 20°-30°   | 484.5  | 9.3       |
| 30°-40°   | 545.6  | 10.4      |
| 40°-50°   | 521.9  | 10.0      |
| 50°-60°   | 427.2  | 8.2       |
| 60°-70°   | 288.0  | 5.5       |
| 70°-80°   | 144.5  | 2.8       |
| 80°-90°   | 39.3   | 0.8       |
| 90°-100°  | 26.9   | 0.5       |
| 100°-110° | 130.1  | 2.5       |
| 110°-120° | 318.7  | 6.1       |
| 120°-130° | 404.6  | 7.7       |
| 130°-140° | 432.2  | 8.3       |
| 140°-150° | 404.2  | 7.7       |
| 150°-160° | 326.0  | 6.2       |
| 160°-170° | 210.4  | 4.0       |
| 170°-180° | 72.5   | 1.4       |
| <hr/>     |        |           |
| 0°-30°    | 942.0  | 18.0      |
| 0°-40°    | 1487.6 | 28.4      |
| 0°-60°    | 2436.7 | 46.6      |
| 0°-90°    | 2908.5 | 55.6      |
| 90°-120°  | 475.6  | 9.1       |
| 90°-150°  | 1716.6 | 32.8      |
| 90°-180°  | 2325.0 | 44.4      |
| 0°-180°   | 5234.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|      | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|------|------|-------|------|-------|------|------|
| 0°   | 1287 | 1287  | 1287 | 1287  | 1287 |      |
| 5°   | 1287 | 1282  | 1269 | 1278  | 1276 | 122  |
| 15°  | 1227 | 1216  | 1187 | 1181  | 1174 | 346  |
| 25°  | 1117 | 1091  | 1043 | 1021  | 1009 | 514  |
| 35°  | 966  | 929   | 864  | 819   | 800  | 605  |
| 45°  | 794  | 747   | 667  | 607   | 582  | 613  |
| 55°  | 603  | 552   | 463  | 403   | 382  | 541  |
| 65°  | 412  | 355   | 273  | 222   | 211  | 408  |
| 75°  | 218  | 168   | 111  | 100   | 98   | 232  |
| 85°  | 55   | 32    | 29   | 27    | 27   | 61   |
| 90°  | 1    | 6     | 14   | 16    | 17   | 5    |
| 95°  | 35   | 11    | 18   | 22    | 22   | 41   |
| 105° | 169  | 175   | 124  | 24    | 25   | 179  |
| 115° | 317  | 320   | 325  | 331   | 333  | 313  |
| 125° | 447  | 451   | 453  | 454   | 456  | 399  |
| 135° | 556  | 559   | 562  | 563   | 562  | 428  |
| 145° | 642  | 646   | 647  | 648   | 648  | 402  |
| 155° | 707  | 706   | 706  | 709   | 706  | 326  |
| 165° | 745  | 744   | 743  | 748   | 744  | 211  |
| 175° | 763  | 760   | 760  | 764   | 760  | 73   |
| 180° | 763  | 763   | 763  | 763   | 763  |      |

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**CANDELA DISTRIBUTION (FULL):**

|        | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|--------|--------|--------|--------|--------|--------|
| 0°     | 1286.8 | 1286.8 | 1286.8 | 1286.8 | 1286.8 |
| 2.5°   | 1292.0 | 1287.8 | 1275.3 | 1286.8 | 1284.7 |
| 5°     | 1286.8 | 1281.5 | 1269.0 | 1278.4 | 1276.3 |
| 7.5°   | 1277.4 | 1272.1 | 1256.5 | 1262.7 | 1259.6 |
| 10°    | 1264.8 | 1257.5 | 1238.7 | 1239.8 | 1234.6 |
| 12.5°  | 1247.1 | 1238.7 | 1214.7 | 1213.7 | 1207.4 |
| 15°    | 1227.3 | 1215.8 | 1186.6 | 1181.3 | 1174.0 |
| 17.5°  | 1203.3 | 1190.7 | 1154.2 | 1143.8 | 1133.3 |
| 20°    | 1176.1 | 1159.4 | 1119.8 | 1106.2 | 1093.7 |
| 22.5°  | 1145.9 | 1126.0 | 1083.3 | 1065.5 | 1054.0 |
| 25°    | 1116.6 | 1090.6 | 1042.6 | 1020.6 | 1009.2 |
| 27.5°  | 1081.2 | 1053.0 | 1000.8 | 971.6  | 953.8  |
| 30°    | 1044.6 | 1013.3 | 954.9  | 919.4  | 902.7  |
| 32.5°  | 1008.1 | 971.6  | 909.0  | 869.3  | 851.6  |
| 35°    | 966.4  | 928.8  | 864.1  | 819.2  | 800.4  |
| 37.5°  | 924.6  | 883.9  | 816.1  | 766.0  | 743.0  |
| 40°    | 885.0  | 839.0  | 765.0  | 710.7  | 686.7  |
| 42.5°  | 840.1  | 794.2  | 716.9  | 656.4  | 635.5  |
| 45°    | 794.2  | 747.2  | 666.9  | 607.4  | 582.3  |
| 47.5°  | 749.3  | 697.1  | 617.8  | 553.1  | 531.2  |
| 50°    | 699.2  | 650.2  | 565.6  | 500.9  | 476.9  |
| 52.5°  | 654.3  | 600.1  | 516.6  | 448.7  | 427.9  |
| 55°    | 603.2  | 552.1  | 463.4  | 402.8  | 382.0  |
| 57.5°  | 557.3  | 502.0  | 412.2  | 354.8  | 337.1  |
| 60°    | 509.3  | 451.9  | 365.3  | 308.9  | 291.2  |
| 62.5°  | 461.3  | 403.9  | 317.3  | 265.1  | 246.3  |
| 65°    | 412.2  | 354.8  | 273.4  | 222.3  | 210.8  |
| 67.5°  | 363.2  | 304.7  | 225.4  | 186.8  | 174.3  |
| 70°    | 315.2  | 258.8  | 185.8  | 149.2  | 137.8  |
| 72.5°  | 267.2  | 211.8  | 147.1  | 119.0  | 115.8  |
| 75°    | 218.1  | 168.0  | 110.6  | 100.2  | 98.1   |
| 77.5°  | 173.2  | 127.3  | 86.6   | 80.4   | 78.3   |
| 80°    | 130.4  | 87.7   | 65.7   | 62.6   | 60.5   |
| 82.5°  | 89.7   | 54.3   | 47.0   | 43.8   | 43.8   |
| 85°    | 55.3   | 32.4   | 29.2   | 27.1   | 27.1   |
| 87.5°  | 25.0   | 13.6   | 13.6   | 12.5   | 11.5   |
| 90°    | 0.6    | 6.2    | 13.6   | 15.9   | 17.0   |
| 92.5°  | 13.0   | 9.6    | 14.7   | 18.7   | 19.3   |
| 95°    | 34.6   | 11.3   | 17.6   | 21.5   | 21.5   |
| 97.5°  | 62.9   | 47.0   | 18.1   | 22.7   | 23.2   |
| 100°   | 95.8   | 107.1  | 18.7   | 23.2   | 23.8   |
| 102.5° | 133.2  | 140.5  | 41.9   | 23.2   | 24.4   |
| 105°   | 168.9  | 175.1  | 124.1  | 23.8   | 24.9   |
| 107.5° | 206.9  | 212.0  | 220.5  | 133.2  | 58.9   |
| 110°   | 244.8  | 249.4  | 255.6  | 236.9  | 155.8  |



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**CANDELA DISTRIBUTION (continued):**

|        | 0°    | 22.5° | 45°   | 67.5° | 90°   |
|--------|-------|-------|-------|-------|-------|
| 112.5° | 281.1 | 285.1 | 291.3 | 296.4 | 295.3 |
| 115°   | 316.8 | 320.2 | 325.3 | 331.0 | 333.2 |
| 117.5° | 351.9 | 355.9 | 358.7 | 363.3 | 363.8 |
| 120°   | 384.2 | 389.3 | 391.0 | 395.6 | 395.6 |
| 122.5° | 417.1 | 421.1 | 423.3 | 426.2 | 426.7 |
| 125°   | 446.6 | 451.1 | 453.4 | 454.5 | 455.6 |
| 127.5° | 476.0 | 480.6 | 483.4 | 485.1 | 484.0 |
| 130°   | 503.2 | 507.8 | 510.0 | 512.3 | 511.2 |
| 132.5° | 529.3 | 533.9 | 535.6 | 537.8 | 536.1 |
| 135°   | 556.0 | 559.4 | 561.6 | 563.3 | 561.6 |
| 137.5° | 578.6 | 583.2 | 584.3 | 587.1 | 586.0 |
| 140°   | 601.3 | 604.7 | 606.4 | 608.7 | 607.5 |
| 142.5° | 622.3 | 625.7 | 627.4 | 629.1 | 627.4 |
| 145°   | 641.5 | 645.5 | 646.6 | 647.8 | 647.8 |
| 147.5° | 660.2 | 663.1 | 664.2 | 665.3 | 662.5 |
| 150°   | 677.2 | 678.9 | 680.1 | 681.2 | 679.5 |
| 152.5° | 692.5 | 693.1 | 693.7 | 695.9 | 693.1 |
| 155°   | 706.7 | 705.6 | 706.1 | 709.0 | 705.6 |
| 157.5° | 718.0 | 718.0 | 717.5 | 720.9 | 716.3 |
| 160°   | 728.2 | 727.7 | 727.1 | 730.5 | 726.5 |
| 162.5° | 737.9 | 736.2 | 735.6 | 739.6 | 736.2 |
| 165°   | 745.2 | 743.5 | 743.0 | 747.5 | 743.5 |
| 167.5° | 751.5 | 749.2 | 749.2 | 753.7 | 749.2 |
| 170°   | 756.6 | 754.3 | 754.3 | 758.8 | 754.3 |
| 172.5° | 760.0 | 757.1 | 757.7 | 762.2 | 757.1 |
| 175°   | 762.8 | 760.0 | 760.5 | 764.5 | 760.0 |
| 177.5° | 763.9 | 761.1 | 761.7 | 766.2 | 760.5 |
| 180°   | 762.8 | 762.8 | 762.8 | 762.8 | 762.8 |

(END OF REPORT)