

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: P999814

Luminaire Tested: SA2XXRDIP-B485D725UB40-4F0-XX-W2A-F

Issue Date: 5/6/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P999814  
REPORT IS A COMBINATION OF REPORTS P988369 AND P1007351  
Test Lab: INNOVATION CENTER  
Issue Date: 5/6/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: SA2XXRDIP-B485D725UB40-4F0-XX-W2A-F  
Description: Define 2 Regressed Direct/Indirect Pendant with 4000K BioUP LEDs {m-DER=0.865}  
{m-EER=0.951}  
Light Source: -  
Ballast/Driver: -

**Summary**

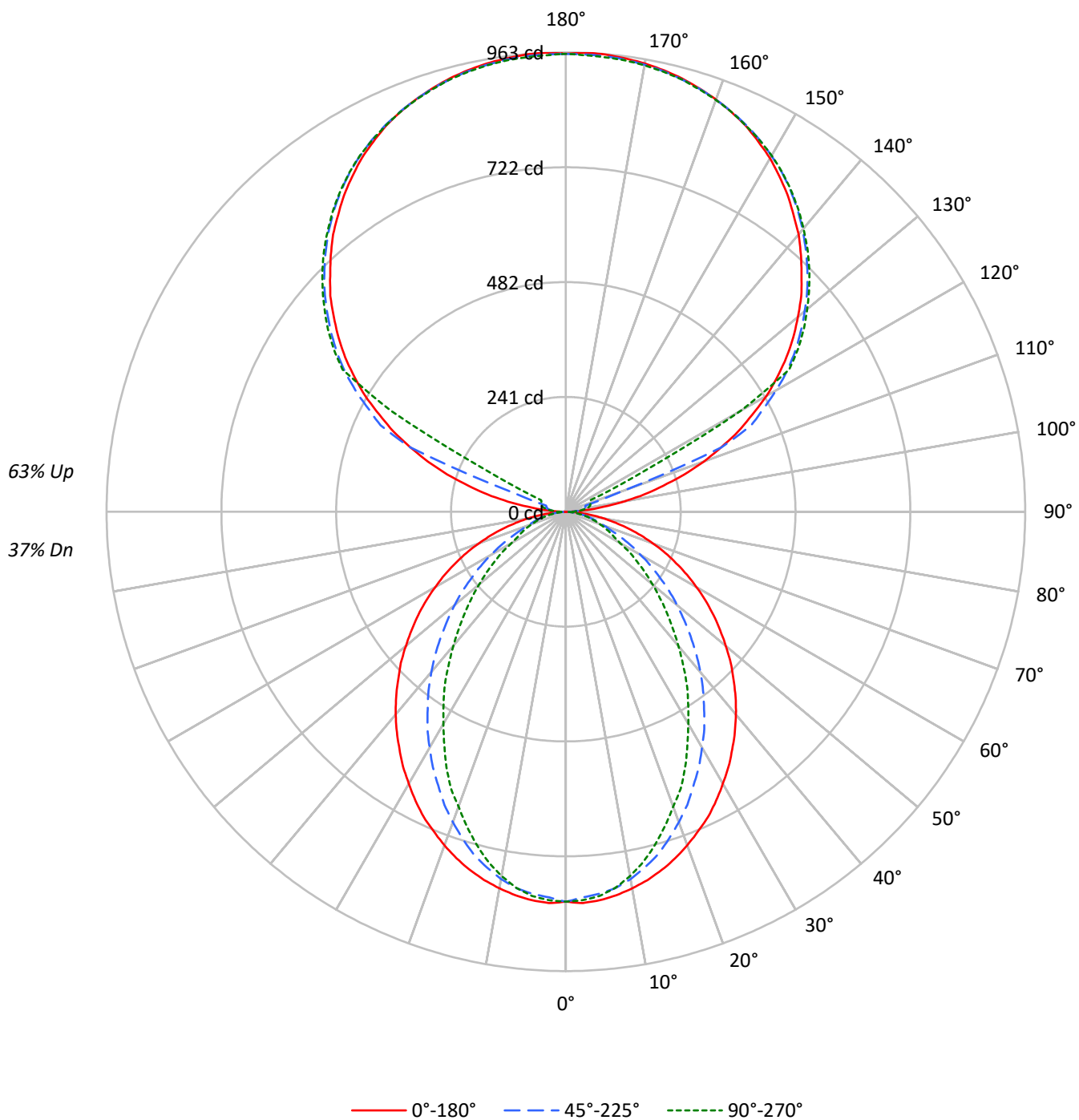
Lumens per Lamp: N/A  
Luminaire Lumens: 4497.0 lumens  
Efficiency: N/A  
Efficacy: 99.7 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 0.99 / 1.16  
Luminous Opening: Rectangular w/ Sides (W: 0.17' x L: 4' x H: 0.1')  
CIE Type: Semi-Indirect

Input Watts (W): 45.1  
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: P999814

CATALOG NUMBER: SA2XXRDIP-B485D725UB40-4F0-XX-W2A-F

### Luminous Intensity Polar Plot



TEST NUMBER: P999814

CATALOG NUMBER: SA2XXRDIP-B485D725UB40-4F0-XX-W2A-F

**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   | 104 | 104 | 104 | 104 | 94 | 94 | 94 | 94 | 76 | 76 | 76 | 60 | 60 | 60 | 45 | 45 | 45 |
| 1   | 95  | 91  | 88  | 84  | 86 | 83 | 80 | 77 | 67 | 65 | 63 | 53 | 52 | 50 | 40 | 39 | 38 |
| 2   | 87  | 80  | 74  | 69  | 79 | 73 | 68 | 64 | 59 | 56 | 53 | 47 | 45 | 43 | 36 | 34 | 33 |
| 3   | 80  | 71  | 64  | 58  | 72 | 64 | 58 | 54 | 53 | 48 | 45 | 42 | 39 | 36 | 32 | 30 | 28 |
| 4   | 73  | 63  | 55  | 49  | 66 | 57 | 51 | 46 | 47 | 42 | 39 | 38 | 34 | 32 | 29 | 26 | 25 |
| 5   | 67  | 56  | 48  | 42  | 61 | 51 | 44 | 39 | 42 | 37 | 33 | 34 | 30 | 27 | 26 | 24 | 22 |
| 6   | 62  | 50  | 42  | 37  | 56 | 46 | 39 | 34 | 38 | 33 | 29 | 31 | 27 | 24 | 24 | 21 | 19 |
| 7   | 57  | 45  | 38  | 32  | 52 | 42 | 35 | 30 | 35 | 30 | 26 | 28 | 24 | 22 | 22 | 19 | 17 |
| 8   | 53  | 41  | 34  | 29  | 48 | 38 | 31 | 27 | 32 | 27 | 23 | 26 | 22 | 19 | 20 | 17 | 16 |
| 9   | 49  | 38  | 30  | 26  | 45 | 35 | 28 | 24 | 29 | 24 | 21 | 24 | 20 | 17 | 19 | 16 | 14 |
| 10  | 46  | 35  | 28  | 23  | 42 | 32 | 26 | 21 | 27 | 22 | 19 | 22 | 18 | 16 | 17 | 15 | 13 |

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

|     | 0°    | 45°   | 90°   |
|-----|-------|-------|-------|
| 0°  | 12939 | 12939 | 12939 |
| 5°  | 12960 | 12308 | 12218 |
| 10° | 12831 | 11675 | 11289 |
| 15° | 12655 | 10925 | 10231 |
| 20° | 12421 | 10072 | 9124  |
| 25° | 12184 | 9199  | 8111  |
| 30° | 11861 | 8347  | 7004  |
| 35° | 11547 | 7489  | 6054  |
| 40° | 11229 | 6645  | 5076  |
| 45° | 10857 | 5774  | 4223  |
| 50° | 10472 | 4936  | 3437  |
| 55° | 10072 | 4097  | 2730  |
| 60° | 9607  | 3276  | 2065  |
| 65° | 9072  | 2498  | 1678  |
| 70° | 8423  | 1812  | 1334  |
| 75° | 7613  | 1383  | 1020  |
| 80° | 6435  | 936   | 683   |
| 85° | 4492  | 430   | 332   |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 10857 cd/sqm

TEST NUMBER: P999814

CATALOG NUMBER: SA2XXRDIP-B485D725UB40-4F0-XX-W2A-F

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 76.6   | 1.7       |
| 10°-20°   | 210.3  | 4.7       |
| 20°-30°   | 295.2  | 6.6       |
| 30°-40°   | 321.8  | 7.2       |
| 40°-50°   | 295.8  | 6.6       |
| 50°-60°   | 232.3  | 5.2       |
| 60°-70°   | 151.2  | 3.4       |
| 70°-80°   | 77.8   | 1.7       |
| 80°-90°   | 21.6   | 0.5       |
| 90°-100°  | 31.7   | 0.7       |
| 100°-110° | 118.0  | 2.6       |
| 110°-120° | 313.0  | 7.0       |
| 120°-130° | 519.1  | 11.5      |
| 130°-140° | 551.4  | 12.3      |
| 140°-150° | 512.4  | 11.4      |
| 150°-160° | 412.0  | 9.2       |
| 160°-170° | 265.5  | 5.9       |
| 170°-180° | 91.4   | 2.0       |
| 0°-30°    | 582.1  | 12.9      |
| 0°-40°    | 904.0  | 20.1      |
| 0°-60°    | 1432.1 | 31.8      |
| 0°-90°    | 1682.7 | 37.4      |
| 90°-120°  | 462.7  | 10.3      |
| 90°-150°  | 2045.5 | 45.5      |
| 90°-180°  | 2814.0 | 62.6      |
| 0°-180°   | 4497.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|      | 0°  | 22.5° | 45° | 67.5° | 90° | Flux |
|------|-----|-------|-----|-------|-----|------|
| 0°   | 817 | 817   | 817 | 817   | 817 |      |
| 5°   | 817 | 814   | 804 | 811   | 808 | 78   |
| 15°  | 777 | 769   | 744 | 730   | 723 | 219  |
| 25°  | 706 | 682   | 633 | 603   | 592 | 325  |
| 35°  | 608 | 570   | 505 | 459   | 442 | 381  |
| 45°  | 497 | 448   | 370 | 317   | 300 | 384  |
| 55°  | 378 | 320   | 240 | 196   | 182 | 338  |
| 65°  | 255 | 195   | 129 | 104   | 101 | 253  |
| 75°  | 136 | 84    | 59  | 54    | 53  | 144  |
| 85°  | 32  | 16    | 14  | 14    | 14  | 36   |
| 90°  | 1   | 8     | 14  | 17    | 19  | 4    |
| 95°  | 45  | 22    | 27  | 31    | 30  | 53   |
| 105° | 211 | 232   | 42  | 50    | 53  | 226  |
| 115° | 399 | 411   | 429 | 107   | 57  | 393  |
| 125° | 565 | 574   | 587 | 592   | 594 | 504  |
| 135° | 699 | 710   | 716 | 723   | 722 | 540  |
| 145° | 811 | 810   | 822 | 827   | 823 | 507  |
| 155° | 893 | 886   | 895 | 899   | 893 | 411  |
| 165° | 940 | 936   | 938 | 943   | 938 | 266  |
| 175° | 962 | 957   | 959 | 963   | 956 | 92   |
| 180° | 960 | 960   | 960 | 960   | 960 |      |

TEST NUMBER: P999814

CATALOG NUMBER: SA2XXRDIP-B485D725UB40-4F0-XX-W2A-F

**CANDELA DISTRIBUTION (FULL):**

|        | 0°    | 22.5° | 45°   | 67.5° | 90°   |
|--------|-------|-------|-------|-------|-------|
| 0°     | 817.4 | 817.4 | 817.4 | 817.4 | 817.4 |
| 2.5°   | 821.1 | 817.4 | 809.2 | 816.6 | 815.1 |
| 5°     | 817.4 | 813.7 | 804.0 | 810.7 | 808.5 |
| 7.5°   | 810.7 | 806.3 | 795.9 | 798.9 | 795.2 |
| 10°    | 801.8 | 796.6 | 781.9 | 779.6 | 775.2 |
| 12.5°  | 790.7 | 784.1 | 764.1 | 759.7 | 751.5 |
| 15°    | 777.4 | 769.3 | 744.1 | 730.1 | 722.7 |
| 17.5°  | 761.9 | 750.0 | 719.0 | 702.7 | 690.9 |
| 20°    | 744.1 | 729.3 | 692.3 | 673.9 | 657.6 |
| 22.5°  | 724.9 | 707.9 | 665.0 | 639.8 | 628.7 |
| 25°    | 705.7 | 682.0 | 633.2 | 602.8 | 591.8 |
| 27.5°  | 682.7 | 657.6 | 603.6 | 568.8 | 551.8 |
| 30°    | 658.3 | 630.2 | 571.0 | 533.3 | 513.3 |
| 32.5°  | 634.7 | 600.6 | 540.0 | 495.6 | 477.1 |
| 35°    | 608.0 | 570.3 | 505.2 | 458.6 | 442.3 |
| 37.5°  | 582.1 | 541.5 | 472.7 | 421.6 | 403.1 |
| 40°    | 554.8 | 510.4 | 438.6 | 386.1 | 366.9 |
| 42.5°  | 526.7 | 479.3 | 404.6 | 349.9 | 331.4 |
| 45°    | 497.1 | 447.5 | 369.8 | 317.3 | 299.6 |
| 47.5°  | 469.0 | 416.4 | 336.6 | 284.0 | 267.8 |
| 50°    | 437.9 | 385.4 | 304.0 | 253.0 | 237.4 |
| 52.5°  | 407.6 | 352.1 | 272.9 | 224.1 | 210.1 |
| 55°    | 378.0 | 320.3 | 240.4 | 196.0 | 182.0 |
| 57.5°  | 347.7 | 288.5 | 211.6 | 170.1 | 158.3 |
| 60°    | 316.6 | 257.4 | 181.2 | 143.5 | 131.7 |
| 62.5°  | 286.3 | 227.1 | 155.3 | 119.8 | 113.9 |
| 65°    | 255.2 | 195.3 | 128.7 | 103.6 | 101.3 |
| 67.5°  | 225.6 | 165.7 | 103.6 | 91.0  | 88.8  |
| 70°    | 194.5 | 136.8 | 85.8  | 78.4  | 75.4  |
| 72.5°  | 165.0 | 110.2 | 71.7  | 65.8  | 64.4  |
| 75°    | 136.1 | 84.3  | 59.2  | 54.0  | 53.3  |
| 77.5°  | 107.3 | 59.9  | 46.6  | 43.6  | 42.2  |
| 80°    | 80.6  | 42.9  | 35.5  | 32.5  | 32.5  |
| 82.5°  | 56.2  | 28.8  | 24.4  | 22.9  | 22.9  |
| 85°    | 31.8  | 16.3  | 14.1  | 14.1  | 14.1  |
| 87.5°  | 11.8  | 5.9   | 5.9   | 5.2   | 5.2   |
| 90°    | 0.7   | 8.3   | 13.9  | 17.4  | 18.8  |
| 92.5°  | 17.4  | 14.6  | 16.7  | 18.1  | 18.8  |
| 95°    | 45.2  | 22.2  | 27.1  | 30.6  | 29.9  |
| 97.5°  | 81.3  | 24.3  | 35.4  | 37.5  | 38.2  |
| 100°   | 122.9 | 27.8  | 39.6  | 45.2  | 46.5  |
| 102.5° | 168.8 | 167.4 | 41.0  | 48.6  | 50.7  |
| 105°   | 211.2 | 232.0 | 42.4  | 50.0  | 52.8  |
| 107.5° | 260.5 | 277.9 | 43.8  | 51.4  | 54.2  |
| 110°   | 307.7 | 322.3 | 121.6 | 52.1  | 54.9  |

TEST NUMBER: P999814

CATALOG NUMBER: SA2XXRDIP-B485D725UB40-4F0-XX-W2A-F

**CANDELA DISTRIBUTION (continued):**

|        | 0°    | 22.5° | 45°   | 67.5° | 90°   |
|--------|-------|-------|-------|-------|-------|
| 112.5° | 352.2 | 364.7 | 352.9 | 53.5  | 55.6  |
| 115°   | 399.4 | 411.2 | 428.6 | 107.0 | 57.0  |
| 117.5° | 440.4 | 454.3 | 466.1 | 366.8 | 184.8 |
| 120°   | 486.2 | 496.7 | 509.2 | 517.5 | 423.7 |
| 122.5° | 525.1 | 536.3 | 550.1 | 554.3 | 555.0 |
| 125°   | 564.7 | 573.8 | 587.0 | 591.8 | 593.9 |
| 127.5° | 600.9 | 610.6 | 621.0 | 627.9 | 628.6 |
| 130°   | 634.9 | 646.0 | 653.6 | 661.3 | 660.6 |
| 132.5° | 669.6 | 678.7 | 686.3 | 692.5 | 691.8 |
| 135°   | 698.8 | 709.9 | 716.2 | 723.1 | 721.7 |
| 137.5° | 729.4 | 737.7 | 744.6 | 751.6 | 749.5 |
| 140°   | 759.2 | 764.8 | 772.4 | 778.7 | 775.2 |
| 142.5° | 784.2 | 789.1 | 798.1 | 803.7 | 800.2 |
| 145°   | 810.6 | 809.9 | 821.7 | 826.6 | 823.1 |
| 147.5° | 833.6 | 831.5 | 843.3 | 846.8 | 844.0 |
| 150°   | 855.8 | 850.9 | 862.0 | 866.2 | 862.7 |
| 152.5° | 874.5 | 869.0 | 879.4 | 883.6 | 878.7 |
| 155°   | 892.6 | 886.3 | 894.7 | 898.8 | 893.3 |
| 157.5° | 907.2 | 901.6 | 907.9 | 912.7 | 907.2 |
| 160°   | 919.7 | 915.5 | 919.7 | 923.9 | 919.0 |
| 162.5° | 930.8 | 926.6 | 930.1 | 935.0 | 928.7 |
| 165°   | 940.5 | 936.4 | 938.4 | 943.3 | 938.4 |
| 167.5° | 948.2 | 944.0 | 946.1 | 950.9 | 944.7 |
| 170°   | 954.4 | 950.3 | 951.6 | 956.5 | 950.3 |
| 172.5° | 958.6 | 954.4 | 955.8 | 960.7 | 954.4 |
| 175°   | 962.1 | 957.2 | 958.6 | 963.4 | 956.5 |
| 177.5° | 963.4 | 958.6 | 959.3 | 964.1 | 957.9 |
| 180°   | 960.0 | 960.0 | 960.0 | 960.0 | 960.0 |

(END OF REPORT)