

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: P1025916

Luminaire Tested: S124DIP-B795D810UB40-4F0-XX-W2A-D4

Issue Date: 5/6/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1025916  
REPORT IS A COMBINATION OF REPORTS P996606 AND P1007351  
Test Lab: INNOVATION CENTER  
Issue Date: 5/6/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S124DIP-B795D810UB40-4F0-XX-W2A-D4  
Description: Define 4 Direct/Indirect Pendant with 4000K BioUP LEDs {m-DER=0.865} {m-EER=0.951}  
Light Source: -  
Ballast/Driver: -

**Summary**

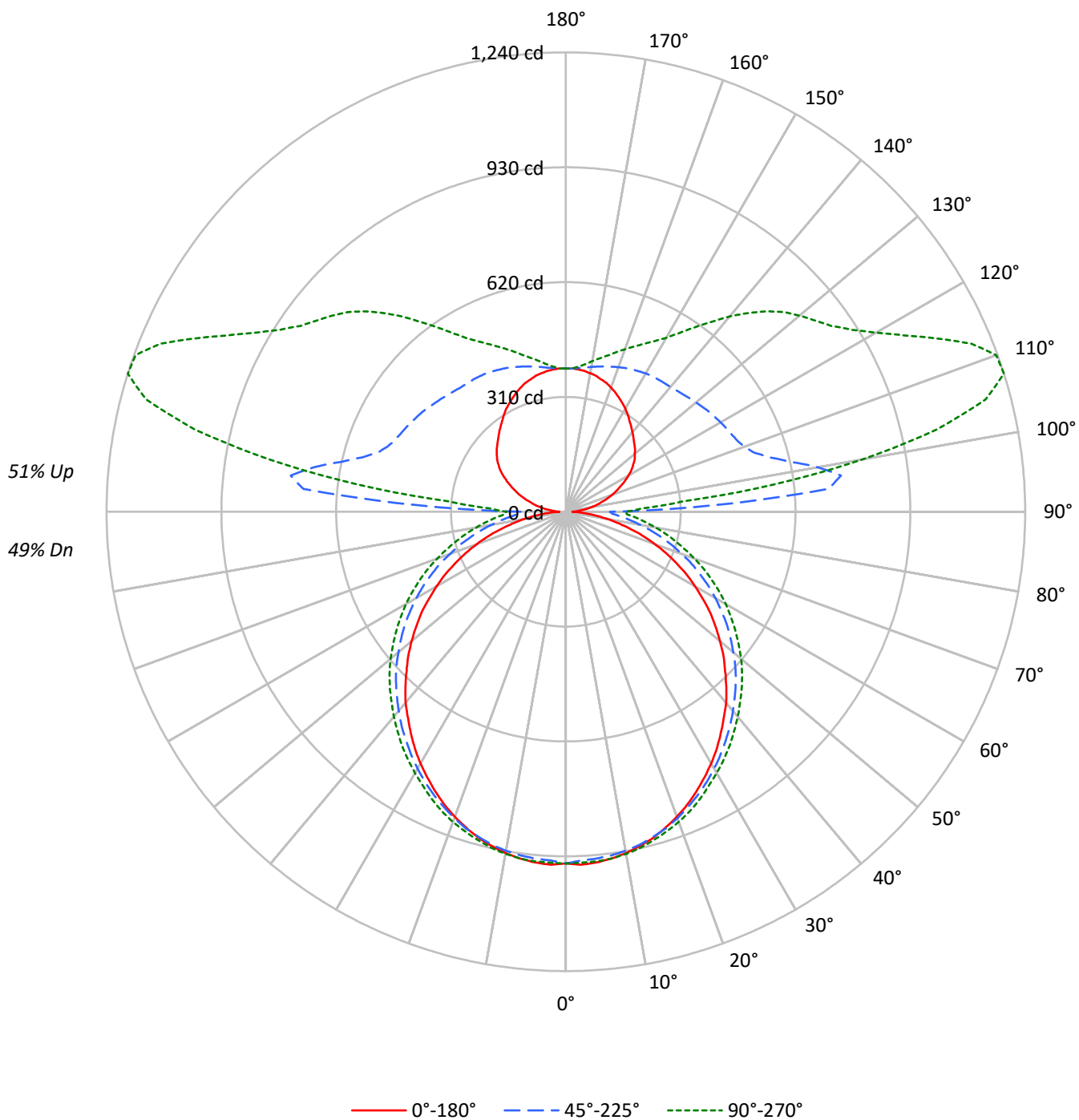
Lumens per Lamp: N/A  
Luminaire Lumens: 6058.7 lumens  
Efficiency: N/A  
Efficacy: 106.3 lumens/watt  
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39  
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')  
CIE Type: General Diffuse

Input Watts (W): 57  
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: P1025916

CATALOG NUMBER: S124DIP-B795D810UB40-4F0-XX-W2A-D4

### Luminous Intensity Polar Plot



TEST NUMBER: P1025916

CATALOG NUMBER: S124DIP-B795D810UB40-4F0-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 | 50 | 30 | 10 |
| RCR |     |     |     |     |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 0   | 107 | 107 | 107 | 107 | 99 | 99 | 99 | 99 | 83 | 83 | 83 | 69 | 69 | 69 | 56 | 56 | 56 |    |    | 49 |
| 1   | 97  | 92  | 88  | 84  | 89 | 85 | 81 | 78 | 71 | 69 | 66 | 59 | 57 | 55 | 48 | 46 | 45 |    |    | 40 |
| 2   | 88  | 80  | 73  | 68  | 80 | 73 | 68 | 63 | 62 | 58 | 54 | 51 | 48 | 45 | 41 | 39 | 37 |    |    | 32 |
| 3   | 80  | 70  | 62  | 56  | 73 | 64 | 58 | 52 | 54 | 49 | 45 | 45 | 41 | 38 | 36 | 33 | 31 |    |    | 27 |
| 4   | 73  | 61  | 53  | 47  | 67 | 57 | 49 | 44 | 48 | 42 | 38 | 40 | 36 | 32 | 32 | 29 | 26 |    |    | 23 |
| 5   | 67  | 55  | 46  | 40  | 61 | 50 | 43 | 37 | 43 | 37 | 32 | 36 | 31 | 28 | 29 | 26 | 23 |    |    | 20 |
| 6   | 61  | 49  | 40  | 34  | 56 | 45 | 38 | 32 | 38 | 33 | 28 | 32 | 27 | 24 | 26 | 23 | 20 |    |    | 17 |
| 7   | 57  | 44  | 36  | 30  | 52 | 41 | 33 | 28 | 35 | 29 | 25 | 29 | 25 | 21 | 24 | 20 | 18 |    |    | 15 |
| 8   | 52  | 40  | 32  | 26  | 48 | 37 | 30 | 25 | 32 | 26 | 22 | 27 | 22 | 19 | 22 | 18 | 16 |    |    | 13 |
| 9   | 49  | 36  | 29  | 23  | 45 | 34 | 27 | 22 | 29 | 23 | 19 | 24 | 20 | 17 | 20 | 17 | 14 |    |    | 12 |
| 10  | 46  | 33  | 26  | 21  | 42 | 31 | 24 | 20 | 27 | 21 | 17 | 22 | 18 | 15 | 19 | 15 | 13 |    |    | 11 |

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

|     | 0°   | 45°  | 90°  |
|-----|------|------|------|
| 0°  | 7742 | 7742 | 7742 |
| 5°  | 7763 | 7541 | 7554 |
| 10° | 7713 | 7392 | 7371 |
| 15° | 7641 | 7225 | 7164 |
| 20° | 7534 | 7044 | 6964 |
| 25° | 7413 | 6845 | 6747 |
| 30° | 7283 | 6648 | 6527 |
| 35° | 7136 | 6446 | 6330 |
| 40° | 7017 | 6253 | 6127 |
| 45° | 6842 | 6071 | 5947 |
| 50° | 6693 | 5865 | 5757 |
| 55° | 6538 | 5665 | 5539 |
| 60° | 6300 | 5418 | 5333 |
| 65° | 6036 | 5152 | 5085 |
| 70° | 5716 | 4846 | 4799 |
| 75° | 5271 | 4507 | 4527 |
| 80° | 4767 | 4162 | 4242 |
| 85° | 4097 | 3813 | 4012 |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 6842 cd/sqm

TEST NUMBER: P1025916

CATALOG NUMBER: S124DIP-B795D810UB40-4F0-XX-W2A-D4

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 90.0   | 1.5       |
| 10°-20°   | 257.7  | 4.3       |
| 20°-30°   | 389.7  | 6.4       |
| 30°-40°   | 471.5  | 7.8       |
| 40°-50°   | 498.4  | 8.2       |
| 50°-60°   | 469.1  | 7.7       |
| 60°-70°   | 389.3  | 6.4       |
| 70°-80°   | 273.2  | 4.5       |
| 80°-90°   | 155.5  | 2.6       |
| 90°-100°  | 378.7  | 6.3       |
| 100°-110° | 651.7  | 10.8      |
| 110°-120° | 566.0  | 9.3       |
| 120°-130° | 462.8  | 7.6       |
| 130°-140° | 375.9  | 6.2       |
| 140°-150° | 280.8  | 4.6       |
| 150°-160° | 195.8  | 3.2       |
| 160°-170° | 115.2  | 1.9       |
| 170°-180° | 37.4   | 0.6       |
| 0°-30°    | 737.4  | 12.2      |
| 0°-40°    | 1208.9 | 20.0      |
| 0°-60°    | 2176.5 | 35.9      |
| 0°-90°    | 2994.4 | 49.4      |
| 90°-120°  | 1596.4 | 26.3      |
| 90°-150°  | 2715.9 | 44.8      |
| 90°-180°  | 3064.0 | 50.6      |
| 0°-180°   | 6058.7 | 100.0     |

**CANDELA DISTRIBUTION:**

|      | 0°  | 22.5° | 45° | 67.5° | 90°  | Flux |
|------|-----|-------|-----|-------|------|------|
| 0°   | 949 | 949   | 949 | 949   | 949  |      |
| 5°   | 950 | 947   | 940 | 948   | 947  | 90   |
| 15°  | 911 | 912   | 909 | 919   | 918  | 257  |
| 25°  | 834 | 840   | 843 | 855   | 856  | 384  |
| 35°  | 729 | 742   | 753 | 768   | 771  | 457  |
| 45°  | 608 | 628   | 648 | 667   | 672  | 470  |
| 55°  | 476 | 499   | 530 | 552   | 558  | 424  |
| 65°  | 330 | 364   | 400 | 426   | 435  | 327  |
| 75°  | 183 | 222   | 267 | 297   | 306  | 194  |
| 85°  | 56  | 101   | 149 | 181   | 191  | 59   |
| 90°  | 18  | 66    | 119 | 151   | 160  | 13   |
| 95°  | 39  | 128   | 711 | 428   | 316  | 38   |
| 105° | 98  | 160   | 568 | 1169  | 1174 | 105  |
| 115° | 163 | 212   | 494 | 927   | 1106 | 162  |
| 125° | 222 | 262   | 472 | 776   | 875  | 198  |
| 135° | 261 | 310   | 448 | 671   | 765  | 202  |
| 145° | 300 | 342   | 436 | 550   | 608  | 188  |
| 155° | 339 | 366   | 424 | 480   | 500  | 157  |
| 165° | 370 | 381   | 406 | 430   | 436  | 104  |
| 175° | 386 | 386   | 390 | 395   | 393  | 37   |
| 180° | 386 | 386   | 386 | 386   | 386  |      |

TEST NUMBER: P1025916

CATALOG NUMBER: S124DIP-B795D810UB40-4F0-XX-W2A-D4

**CANDELA DISTRIBUTION (FULL):**

|        | 0°    | 22.5° | 45°   | 67.5°  | 90°    |
|--------|-------|-------|-------|--------|--------|
| 0°     | 949.4 | 949.4 | 949.4 | 949.4  | 949.4  |
| 2.5°   | 953.7 | 950.5 | 942.0 | 949.4  | 948.4  |
| 5°     | 950.5 | 947.3 | 939.9 | 948.4  | 947.3  |
| 7.5°   | 944.1 | 942.0 | 935.6 | 945.2  | 944.1  |
| 10°    | 935.6 | 934.5 | 929.2 | 938.8  | 937.7  |
| 12.5°  | 923.9 | 923.9 | 920.7 | 929.2  | 929.2  |
| 15°    | 911.2 | 912.2 | 909.0 | 918.6  | 917.5  |
| 17.5°  | 894.1 | 897.3 | 896.3 | 905.8  | 904.8  |
| 20°    | 876.1 | 879.3 | 880.3 | 891.0  | 891.0  |
| 22.5°  | 855.9 | 860.1 | 862.2 | 872.9  | 875.0  |
| 25°    | 833.5 | 839.9 | 843.1 | 854.8  | 855.9  |
| 27.5°  | 809.1 | 818.7 | 822.9 | 833.5  | 834.6  |
| 30°    | 784.6 | 793.1 | 800.6 | 812.3  | 814.4  |
| 32.5°  | 758.1 | 768.7 | 777.2 | 791.0  | 793.1  |
| 35°    | 729.4 | 742.1 | 752.7 | 767.6  | 770.8  |
| 37.5°  | 700.6 | 715.5 | 728.3 | 743.2  | 746.4  |
| 40°    | 673.0 | 686.8 | 701.7 | 717.7  | 721.9  |
| 42.5°  | 641.1 | 657.1 | 675.1 | 693.2  | 696.4  |
| 45°    | 608.1 | 628.3 | 648.5 | 666.6  | 671.9  |
| 47.5°  | 577.3 | 597.5 | 620.9 | 639.0  | 645.4  |
| 50°    | 543.3 | 566.7 | 590.1 | 611.3  | 617.7  |
| 52.5°  | 509.3 | 532.7 | 560.3 | 581.6  | 587.9  |
| 55°    | 476.3 | 498.6 | 530.5 | 551.8  | 558.2  |
| 57.5°  | 439.1 | 466.7 | 497.6 | 523.1  | 528.4  |
| 60°    | 403.0 | 430.6 | 465.7 | 490.1  | 498.6  |
| 62.5°  | 367.9 | 398.7 | 433.8 | 458.2  | 466.7  |
| 65°    | 329.6 | 363.6 | 399.8 | 426.3  | 434.8  |
| 67.5°  | 293.4 | 329.6 | 367.9 | 394.4  | 403.0  |
| 70°    | 256.2 | 292.4 | 332.8 | 361.5  | 368.9  |
| 72.5°  | 220.1 | 257.3 | 300.9 | 328.5  | 337.0  |
| 75°    | 182.9 | 222.2 | 266.9 | 296.6  | 306.2  |
| 77.5°  | 147.8 | 189.2 | 236.0 | 265.8  | 276.4  |
| 80°    | 115.9 | 158.4 | 205.2 | 237.1  | 245.6  |
| 82.5°  | 84.0  | 128.6 | 175.4 | 208.4  | 218.0  |
| 85°    | 56.3  | 101.0 | 148.8 | 180.7  | 191.4  |
| 87.5°  | 35.1  | 78.7  | 125.5 | 156.3  | 165.9  |
| 90°    | 17.8  | 65.6  | 119.0 | 151.3  | 160.5  |
| 92.5°  | 26.5  | 111.6 | 396.5 | 226.9  | 206.3  |
| 95°    | 38.9  | 127.8 | 711.2 | 427.6  | 316.0  |
| 97.5°  | 54.6  | 130.9 | 749.2 | 740.4  | 569.3  |
| 100°   | 69.4  | 138.0 | 691.2 | 975.0  | 813.2  |
| 102.5° | 84.6  | 147.4 | 621.4 | 1118.9 | 1026.4 |
| 105°   | 98.4  | 159.5 | 568.2 | 1169.1 | 1173.5 |
| 107.5° | 115.9 | 173.0 | 531.8 | 1146.7 | 1240.0 |
| 110°   | 132.2 | 185.5 | 513.1 | 1079.6 | 1236.2 |



TEST NUMBER: P1025916

CATALOG NUMBER: S124DIP-B795D810UB40-4F0-XX-W2A-D4

**CANDELA DISTRIBUTION (continued):**

|        | 0°    | 22.5° | 45°   | 67.5° | 90°    |
|--------|-------|-------|-------|-------|--------|
| 112.5° | 147.9 | 199.0 | 500.9 | 998.8 | 1185.0 |
| 115°   | 162.8 | 212.2 | 494.1 | 926.7 | 1106.5 |
| 117.5° | 179.5 | 225.4 | 488.1 | 868.0 | 1030.6 |
| 120°   | 195.1 | 237.0 | 482.7 | 826.3 | 966.5  |
| 122.5° | 210.3 | 249.4 | 476.6 | 797.8 | 914.5  |
| 125°   | 222.2 | 262.1 | 471.7 | 776.2 | 874.7  |
| 127.5° | 234.3 | 275.7 | 464.8 | 754.2 | 848.2  |
| 130°   | 243.1 | 287.9 | 458.7 | 730.3 | 823.6  |
| 132.5° | 253.0 | 299.4 | 453.7 | 703.0 | 797.7  |
| 135°   | 261.0 | 310.4 | 447.7 | 671.2 | 764.9  |
| 137.5° | 270.1 | 318.8 | 443.4 | 638.6 | 727.3  |
| 140°   | 280.0 | 327.6 | 439.4 | 606.6 | 687.9  |
| 142.5° | 289.6 | 335.6 | 437.3 | 577.7 | 646.0  |
| 145°   | 299.5 | 341.6 | 435.8 | 550.0 | 608.1  |
| 147.5° | 310.9 | 348.5 | 433.5 | 526.1 | 572.4  |
| 150°   | 321.5 | 354.9 | 431.2 | 507.9 | 542.1  |
| 152.5° | 330.3 | 361.0 | 427.4 | 493.5 | 519.3  |
| 155°   | 339.4 | 366.3 | 423.6 | 479.8 | 500.3  |
| 157.5° | 348.5 | 371.2 | 419.8 | 466.9 | 482.8  |
| 160°   | 356.8 | 375.4 | 415.3 | 454.0 | 466.9  |
| 162.5° | 364.4 | 378.8 | 410.7 | 441.4 | 451.7  |
| 165°   | 369.7 | 381.1 | 406.2 | 430.1 | 436.5  |
| 167.5° | 375.8 | 383.0 | 401.6 | 420.2 | 424.4  |
| 170°   | 379.6 | 384.5 | 397.1 | 410.4 | 413.0  |
| 172.5° | 383.4 | 385.6 | 392.5 | 401.6 | 401.6  |
| 175°   | 385.7 | 386.4 | 389.5 | 394.8 | 393.3  |
| 177.5° | 387.2 | 386.4 | 387.2 | 389.8 | 387.2  |
| 180°   | 386.4 | 386.4 | 386.4 | 386.4 | 386.4  |

(END OF REPORT)