

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: P1008018

Luminaire Tested: S122DIP-B290D330UB2750-4F0-XX-W2A-D\_5000K

Issue Date: 5/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1008018  
REPORT IS A COMBINATION OF REPORTS P983896 AND P1007351  
Test Lab: INNOVATION CENTER  
Issue Date: 5/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S122DIP-B290D330UB2750-4F0-XX-W2A-D\_5000K  
Description: Define 2 Direct/Indirect Pendant with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}  
Light Source: -  
Ballast/Driver: -

**Summary**

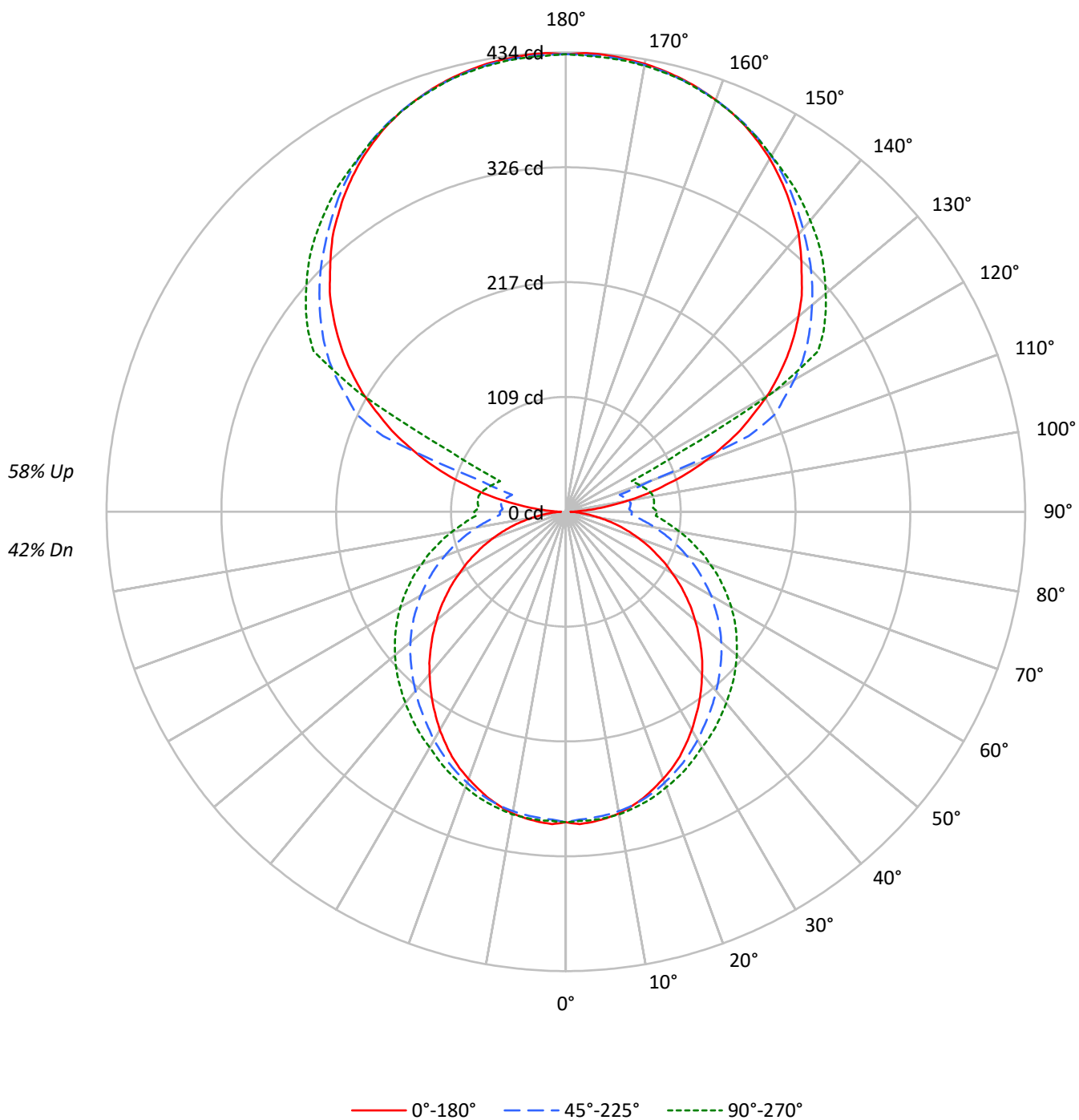
Lumens per Lamp: N/A  
Luminaire Lumens: 2387.1 lumens  
Efficiency: N/A  
Efficacy: 107.0 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.31 / 1.42  
Luminous Opening: Rectangular w/ Sides (W: 0.17' x L: 4' x H: 0.1')  
CIE Type: General Diffuse

Input Watts (W): 22.3  
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 |    |    | 0  |
| RW  | 70  | 50  | 30  | 10  | 70 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 |
| RCR |     |     |     |     |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 0   | 105 | 105 | 105 | 105 | 96 | 96 | 96 | 96 | 79 | 79 | 79 | 63 | 63 | 63 | 48 | 48 | 48 | 48 | 48 | 42 |
| 1   | 95  | 90  | 86  | 82  | 86 | 82 | 78 | 75 | 67 | 64 | 62 | 53 | 52 | 50 | 41 | 40 | 38 | 38 | 38 | 33 |
| 2   | 86  | 78  | 71  | 66  | 78 | 71 | 65 | 60 | 58 | 54 | 50 | 46 | 43 | 41 | 35 | 33 | 31 | 31 | 31 | 26 |
| 3   | 78  | 68  | 60  | 54  | 70 | 62 | 55 | 50 | 51 | 46 | 42 | 40 | 37 | 34 | 31 | 28 | 26 | 26 | 26 | 22 |
| 4   | 71  | 60  | 52  | 45  | 64 | 55 | 47 | 42 | 45 | 39 | 35 | 36 | 32 | 29 | 27 | 24 | 22 | 22 | 22 | 18 |
| 5   | 65  | 53  | 45  | 38  | 59 | 48 | 41 | 36 | 40 | 34 | 30 | 32 | 28 | 24 | 24 | 21 | 19 | 19 | 19 | 16 |
| 6   | 60  | 47  | 39  | 33  | 54 | 43 | 36 | 31 | 36 | 30 | 26 | 29 | 24 | 21 | 22 | 19 | 17 | 17 | 17 | 14 |
| 7   | 55  | 43  | 35  | 29  | 50 | 39 | 32 | 27 | 32 | 27 | 23 | 26 | 22 | 19 | 20 | 17 | 15 | 15 | 15 | 12 |
| 8   | 51  | 39  | 31  | 25  | 46 | 35 | 28 | 24 | 29 | 24 | 20 | 24 | 20 | 16 | 18 | 15 | 13 | 13 | 13 | 11 |
| 9   | 47  | 35  | 28  | 22  | 43 | 32 | 25 | 21 | 27 | 22 | 18 | 22 | 18 | 15 | 17 | 14 | 12 | 12 | 12 | 9  |
| 10  | 44  | 32  | 25  | 20  | 40 | 30 | 23 | 19 | 25 | 19 | 16 | 20 | 16 | 13 | 16 | 13 | 11 | 11 | 11 | 9  |

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

|     | 0°   | 45°  | 90°  |
|-----|------|------|------|
| 0°  | 4643 | 4643 | 4643 |
| 5°  | 4663 | 4444 | 4419 |
| 10° | 4631 | 4290 | 4228 |
| 15° | 4566 | 4131 | 4032 |
| 20° | 4484 | 3963 | 3845 |
| 25° | 4402 | 3803 | 3676 |
| 30° | 4288 | 3641 | 3508 |
| 35° | 4172 | 3483 | 3386 |
| 40° | 4052 | 3348 | 3264 |
| 45° | 3936 | 3226 | 3157 |
| 50° | 3812 | 3112 | 3052 |
| 55° | 3680 | 2991 | 2946 |
| 60° | 3520 | 2866 | 2832 |
| 65° | 3356 | 2723 | 2703 |
| 70° | 3166 | 2568 | 2563 |
| 75° | 2926 | 2413 | 2433 |
| 80° | 2547 | 2250 | 2296 |
| 85° | 2161 | 2101 | 2180 |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 3936 cd/sqm

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CATALOG NUMBER: S122DIP-B290D330UB2750-4F0-XX-W2A-D\_5000K

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 27.8   | 1.2       |
| 10°-20°   | 79.7   | 3.3       |
| 20°-30°   | 120.8  | 5.1       |
| 30°-40°   | 147.1  | 6.2       |
| 40°-50°   | 158.3  | 6.6       |
| 50°-60°   | 153.7  | 6.4       |
| 60°-70°   | 134.3  | 5.6       |
| 70°-80°   | 103.3  | 4.3       |
| 80°-90°   | 70.0   | 2.9       |
| 90°-100°  | 62.0   | 2.6       |
| 100°-110° | 88.0   | 3.7       |
| 110°-120° | 164.0  | 6.9       |
| 120°-130° | 246.6  | 10.3      |
| 130°-140° | 253.7  | 10.6      |
| 140°-150° | 231.7  | 9.7       |
| 150°-160° | 185.5  | 7.8       |
| 160°-170° | 119.5  | 5.0       |
| 170°-180° | 41.1   | 1.7       |
| 0°-30°    | 228.3  | 9.6       |
| 0°-40°    | 375.5  | 15.7      |
| 0°-60°    | 687.5  | 28.8      |
| 0°-90°    | 995.0  | 41.7      |
| 90°-120°  | 314.0  | 13.2      |
| 90°-150°  | 1045.8 | 43.8      |
| 90°-180°  | 1392.0 | 58.3      |
| 0°-180°   | 2387.1 | 100.0     |

**CANDELA DISTRIBUTION:**

|      | 0°  | 22.5° | 45° | 67.5° | 90° | Flux |
|------|-----|-------|-----|-------|-----|------|
| 0°   | 293 | 293   | 293 | 293   | 293 |      |
| 5°   | 294 | 293   | 290 | 293   | 292 | 28   |
| 15°  | 280 | 281   | 281 | 285   | 285 | 79   |
| 25°  | 255 | 258   | 262 | 267   | 268 | 117  |
| 35°  | 220 | 227   | 235 | 244   | 247 | 137  |
| 45°  | 180 | 192   | 207 | 220   | 224 | 139  |
| 55°  | 138 | 153   | 176 | 191   | 196 | 124  |
| 65°  | 94  | 115   | 140 | 158   | 163 | 94   |
| 75°  | 52  | 76    | 103 | 122   | 127 | 55   |
| 85°  | 15  | 42    | 69  | 87    | 93  | 16   |
| 90°  | 5   | 33    | 62  | 81    | 87  | 4    |
| 95°  | 24  | 33    | 61  | 79    | 84  | 27   |
| 105° | 97  | 119   | 56  | 74    | 80  | 104  |
| 115° | 182 | 192   | 218 | 86    | 68  | 179  |
| 125° | 255 | 259   | 279 | 292   | 297 | 228  |
| 135° | 315 | 320   | 327 | 339   | 342 | 244  |
| 145° | 365 | 365   | 370 | 375   | 375 | 228  |
| 155° | 402 | 399   | 403 | 405   | 402 | 185  |
| 165° | 424 | 422   | 423 | 425   | 423 | 120  |
| 175° | 433 | 431   | 432 | 434   | 431 | 41   |
| 180° | 432 | 432   | 432 | 432   | 432 |      |

TEST NUMBER: P1008018

CATALOG NUMBER: S122DIP-B290D330UB2750-4F0-XX-W2A-D\_5000K

**CANDELA DISTRIBUTION (FULL):**

|        | 0°    | 22.5° | 45°   | 67.5° | 90°   |
|--------|-------|-------|-------|-------|-------|
| 0°     | 293.3 | 293.3 | 293.3 | 293.3 | 293.3 |
| 2.5°   | 295.4 | 294.1 | 291.1 | 293.3 | 292.4 |
| 5°     | 294.1 | 292.8 | 290.3 | 292.8 | 292.4 |
| 7.5°   | 292.0 | 291.1 | 289.0 | 292.0 | 291.6 |
| 10°    | 289.4 | 288.6 | 287.3 | 290.7 | 290.3 |
| 12.5°  | 285.2 | 285.6 | 284.8 | 288.2 | 287.7 |
| 15°    | 280.5 | 281.4 | 281.4 | 285.2 | 284.8 |
| 17.5°  | 274.6 | 276.3 | 277.5 | 281.4 | 281.4 |
| 20°    | 268.6 | 270.7 | 272.4 | 277.1 | 277.1 |
| 22.5°  | 262.2 | 264.8 | 267.3 | 272.0 | 272.9 |
| 25°    | 255.0 | 258.0 | 261.8 | 266.9 | 268.2 |
| 27.5°  | 246.5 | 251.2 | 255.4 | 261.8 | 262.7 |
| 30°    | 238.0 | 243.5 | 249.1 | 255.9 | 257.1 |
| 32.5°  | 228.7 | 235.0 | 241.8 | 249.9 | 252.5 |
| 35°    | 219.7 | 227.0 | 235.0 | 244.4 | 247.4 |
| 37.5°  | 210.0 | 218.0 | 228.2 | 238.4 | 241.4 |
| 40°    | 200.2 | 209.5 | 221.0 | 232.1 | 235.9 |
| 42.5°  | 190.8 | 200.2 | 213.8 | 226.1 | 229.9 |
| 45°    | 180.2 | 191.7 | 206.6 | 219.7 | 224.0 |
| 47.5°  | 170.0 | 182.3 | 199.3 | 212.9 | 217.6 |
| 50°    | 159.4 | 172.6 | 191.7 | 206.1 | 210.8 |
| 52.5°  | 149.2 | 163.2 | 183.6 | 198.5 | 203.6 |
| 55°    | 138.1 | 153.4 | 175.5 | 190.8 | 196.4 |
| 57.5°  | 127.5 | 144.5 | 166.6 | 183.2 | 188.7 |
| 60°    | 116.0 | 134.3 | 158.5 | 174.7 | 180.6 |
| 62.5°  | 105.8 | 125.0 | 149.2 | 166.6 | 172.1 |
| 65°    | 94.4  | 115.2 | 140.3 | 157.7 | 163.2 |
| 67.5°  | 84.2  | 105.8 | 131.3 | 148.8 | 154.7 |
| 70°    | 73.1  | 95.2  | 121.6 | 139.8 | 144.9 |
| 72.5°  | 62.9  | 85.9  | 112.6 | 130.5 | 136.9 |
| 75°    | 52.3  | 76.1  | 103.3 | 121.6 | 127.1 |
| 77.5°  | 42.1  | 66.7  | 94.4  | 112.6 | 118.6 |
| 80°    | 31.9  | 57.8  | 85.4  | 103.3 | 109.2 |
| 82.5°  | 23.4  | 48.9  | 76.9  | 94.8  | 100.3 |
| 85°    | 15.3  | 41.7  | 68.9  | 86.7  | 92.7  |
| 87.5°  | 9.4   | 34.9  | 62.1  | 79.5  | 85.0  |
| 90°    | 4.6   | 32.7  | 62.4  | 80.9  | 86.6  |
| 92.5°  | 11.6  | 33.0  | 59.8  | 77.0  | 82.4  |
| 95°    | 23.7  | 33.4  | 61.1  | 78.8  | 83.5  |
| 97.5°  | 39.6  | 32.2  | 61.9  | 78.5  | 83.9  |
| 100°   | 58.4  | 31.2  | 60.3  | 78.5  | 83.9  |
| 102.5° | 78.6  | 92.0  | 58.0  | 76.7  | 82.3  |
| 105°   | 97.2  | 119.0 | 55.7  | 73.9  | 79.9  |
| 107.5° | 119.4 | 137.4 | 53.3  | 71.1  | 77.1  |
| 110°   | 140.3 | 155.3 | 85.7  | 68.1  | 74.0  |



TEST NUMBER: P1008018

CATALOG NUMBER: S122DIP-B290D330UB2750-4F0-XX-W2A-D\_5000K

**CANDELA DISTRIBUTION (continued):**

|        | 0°    | 22.5° | 45°   | 67.5° | 90°   |
|--------|-------|-------|-------|-------|-------|
| 112.5° | 160.3 | 172.7 | 187.0 | 65.8  | 71.3  |
| 115°   | 181.5 | 191.6 | 218.5 | 86.5  | 68.5  |
| 117.5° | 199.6 | 209.3 | 232.4 | 200.4 | 122.7 |
| 120°   | 220.2 | 226.6 | 249.3 | 264.9 | 227.4 |
| 122.5° | 237.8 | 243.2 | 265.1 | 278.5 | 282.6 |
| 125°   | 255.2 | 259.3 | 278.8 | 292.4 | 297.2 |
| 127.5° | 271.5 | 275.3 | 291.5 | 305.3 | 309.5 |
| 130°   | 286.8 | 291.3 | 303.7 | 317.4 | 320.5 |
| 132.5° | 302.4 | 306.0 | 315.8 | 328.4 | 331.5 |
| 135°   | 315.1 | 320.1 | 327.2 | 339.2 | 342.0 |
| 137.5° | 328.8 | 332.6 | 337.9 | 349.0 | 351.1 |
| 140°   | 342.3 | 344.4 | 348.7 | 358.3 | 359.3 |
| 142.5° | 353.5 | 355.3 | 359.4 | 367.0 | 367.5 |
| 145°   | 365.0 | 364.7 | 370.0 | 374.8 | 375.3 |
| 147.5° | 375.3 | 374.4 | 379.7 | 381.7 | 381.7 |
| 150°   | 385.3 | 383.2 | 388.2 | 390.0 | 388.5 |
| 152.5° | 393.8 | 391.3 | 396.0 | 397.9 | 395.7 |
| 155°   | 401.9 | 399.1 | 402.9 | 404.7 | 402.2 |
| 157.5° | 408.5 | 406.0 | 408.8 | 411.0 | 408.5 |
| 160°   | 414.1 | 412.2 | 414.1 | 416.0 | 413.8 |
| 162.5° | 419.1 | 417.2 | 418.8 | 421.0 | 418.2 |
| 165°   | 423.5 | 421.6 | 422.6 | 424.8 | 422.6 |
| 167.5° | 426.9 | 425.1 | 426.0 | 428.2 | 425.4 |
| 170°   | 429.8 | 427.9 | 428.5 | 430.7 | 427.9 |
| 172.5° | 431.6 | 429.8 | 430.4 | 432.6 | 429.8 |
| 175°   | 433.2 | 431.0 | 431.6 | 433.8 | 430.7 |
| 177.5° | 433.8 | 431.6 | 431.9 | 434.1 | 431.3 |
| 180°   | 432.3 | 432.3 | 432.3 | 432.3 | 432.3 |

(END OF REPORT)