

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: P1009255

Luminaire Tested: S122DIP-B675D330UB27-4F0-XX-W2A-D

Issue Date: 5/6/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1009255  
REPORT IS A COMBINATION OF REPORTS P984481 AND P1007351  
Test Lab: INNOVATION CENTER  
Issue Date: 5/6/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S122DIP-B675D330UB27-4F0-XX-W2A-D  
Description: Define 2 Direct/Indirect Pendant with 2700K BioUP LEDs {m-DER=0.473} {m-EER=0.52}  
Light Source: -  
Ballast/Driver: -

**Summary**

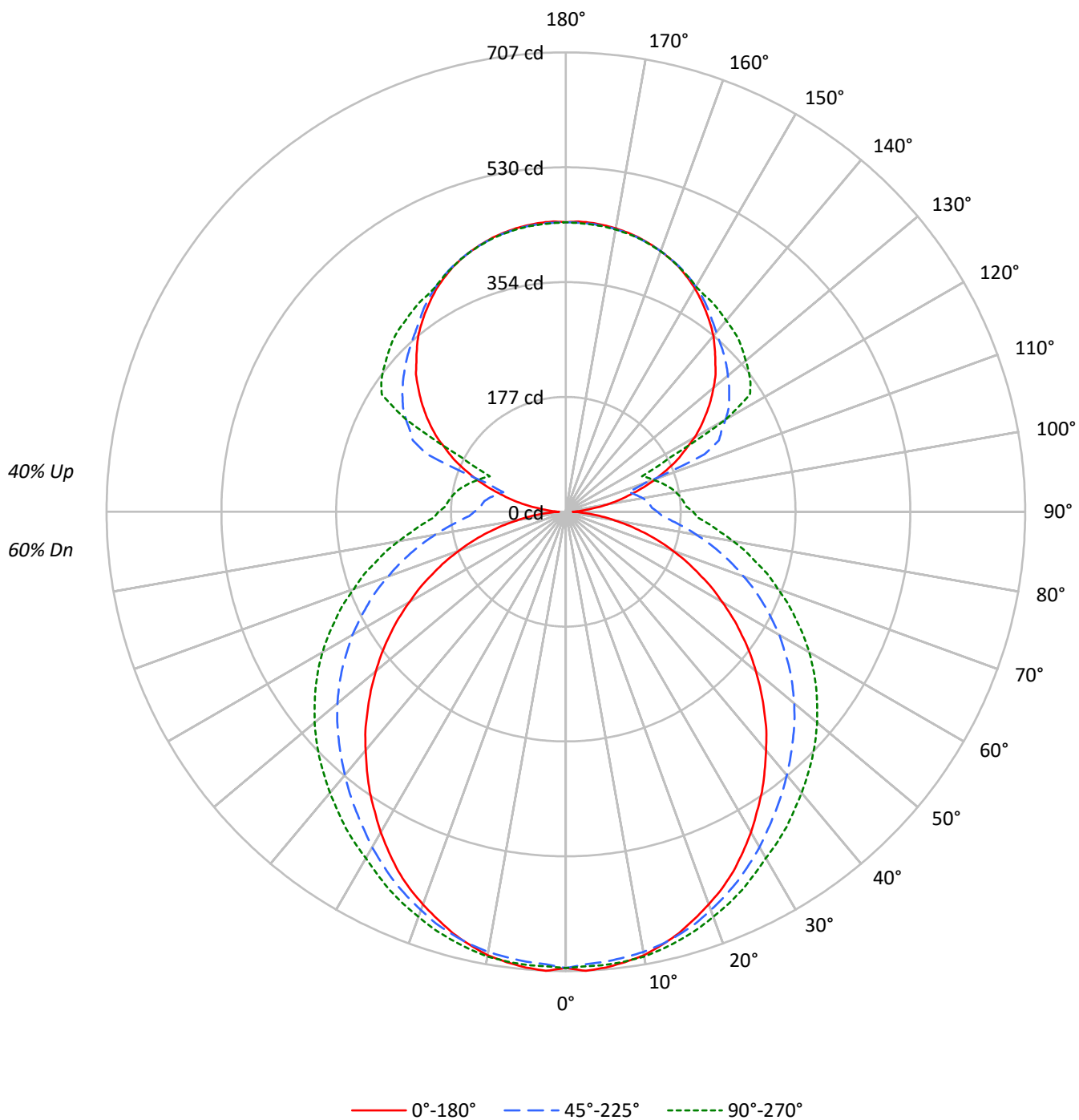
Lumens per Lamp: N/A  
Luminaire Lumens: 3986.0 lumens  
Efficiency: N/A  
Efficacy: 88.2 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.31 / 1.42  
Luminous Opening: Rectangular w/ Sides (W: 0.17' x L: 4' x H: 0.1')  
CIE Type: General Diffuse

Input Watts (W): 45.2  
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 |
| RW  | 70  | 50  | 30  | 10  | 70  | 50  | 30  | 10  | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 |
| RCR |     |     |     |     |     |     |     |     |    |    |    |    |    |    |    |    |    |
| 0   | 109 | 109 | 109 | 109 | 102 | 102 | 102 | 102 | 89 | 89 | 89 | 76 | 76 | 76 | 65 | 65 | 65 |
| 1   | 98  | 93  | 88  | 84  | 91  | 87  | 83  | 79  | 75 | 72 | 69 | 65 | 62 | 60 | 55 | 53 | 51 |
| 2   | 89  | 80  | 73  | 67  | 82  | 75  | 69  | 63  | 65 | 60 | 56 | 56 | 52 | 49 | 47 | 44 | 42 |
| 3   | 80  | 70  | 62  | 55  | 75  | 65  | 58  | 52  | 57 | 51 | 46 | 49 | 44 | 40 | 41 | 38 | 35 |
| 4   | 73  | 62  | 53  | 46  | 68  | 58  | 50  | 44  | 50 | 44 | 39 | 43 | 38 | 34 | 36 | 33 | 30 |
| 5   | 67  | 55  | 46  | 39  | 62  | 51  | 43  | 37  | 45 | 38 | 33 | 38 | 33 | 29 | 33 | 29 | 25 |
| 6   | 62  | 49  | 40  | 34  | 57  | 46  | 38  | 32  | 40 | 34 | 29 | 35 | 29 | 26 | 30 | 25 | 22 |
| 7   | 57  | 44  | 36  | 30  | 53  | 41  | 34  | 28  | 36 | 30 | 25 | 31 | 26 | 22 | 27 | 23 | 20 |
| 8   | 53  | 40  | 32  | 26  | 49  | 38  | 30  | 25  | 33 | 27 | 22 | 29 | 24 | 20 | 25 | 21 | 17 |
| 9   | 49  | 36  | 29  | 23  | 46  | 34  | 27  | 22  | 30 | 24 | 20 | 26 | 21 | 18 | 23 | 19 | 16 |
| 10  | 46  | 33  | 26  | 21  | 43  | 32  | 25  | 20  | 28 | 22 | 18 | 24 | 20 | 16 | 21 | 17 | 14 |

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

|     | 0°    | 45°   | 90°   |
|-----|-------|-------|-------|
| 0°  | 11114 | 11114 | 11114 |
| 5°  | 11164 | 10640 | 10580 |
| 10° | 11090 | 10272 | 10121 |
| 15° | 10933 | 9890  | 9652  |
| 20° | 10735 | 9489  | 9204  |
| 25° | 10540 | 9106  | 8801  |
| 30° | 10267 | 8717  | 8399  |
| 35° | 9991  | 8341  | 8105  |
| 40° | 9701  | 8016  | 7813  |
| 45° | 9422  | 7722  | 7558  |
| 50° | 9125  | 7451  | 7307  |
| 55° | 8812  | 7162  | 7051  |
| 60° | 8430  | 6861  | 6782  |
| 65° | 8031  | 6517  | 6471  |
| 70° | 7579  | 6146  | 6139  |
| 75° | 7004  | 5777  | 5822  |
| 80° | 6092  | 5389  | 5498  |
| 85° | 5170  | 5025  | 5216  |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 9422 cd/sqm

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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 66.6   | 1.7       |
| 10°-20°   | 190.9  | 4.8       |
| 20°-30°   | 289.2  | 7.3       |
| 30°-40°   | 352.2  | 8.8       |
| 40°-50°   | 379.0  | 9.5       |
| 50°-60°   | 368.0  | 9.2       |
| 60°-70°   | 321.4  | 8.1       |
| 70°-80°   | 247.4  | 6.2       |
| 80°-90°   | 166.5  | 4.2       |
| 90°-100°  | 129.0  | 3.2       |
| 100°-110° | 138.2  | 3.5       |
| 110°-120° | 200.4  | 5.0       |
| 120°-130° | 271.6  | 6.8       |
| 130°-140° | 268.8  | 6.7       |
| 140°-150° | 240.0  | 6.0       |
| 150°-160° | 191.2  | 4.8       |
| 160°-170° | 123.2  | 3.1       |
| 170°-180° | 42.4   | 1.1       |
| 0°-30°    | 546.7  | 13.7      |
| 0°-40°    | 898.9  | 22.6      |
| 0°-60°    | 1645.9 | 41.3      |
| 0°-90°    | 2381.1 | 59.7      |
| 90°-120°  | 467.6  | 11.7      |
| 90°-150°  | 1248.0 | 31.3      |
| 90°-180°  | 1605.0 | 40.3      |
| 0°-180°   | 3986.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|      | 0°  | 22.5° | 45° | 67.5° | 90° | Flux |
|------|-----|-------|-----|-------|-----|------|
| 0°   | 702 | 702   | 702 | 702   | 702 |      |
| 5°   | 704 | 701   | 695 | 701   | 700 | 67   |
| 15°  | 672 | 674   | 674 | 683   | 682 | 189  |
| 25°  | 610 | 618   | 627 | 639   | 642 | 281  |
| 35°  | 526 | 543   | 563 | 585   | 592 | 329  |
| 45°  | 431 | 459   | 494 | 526   | 536 | 333  |
| 55°  | 331 | 367   | 420 | 457   | 470 | 296  |
| 65°  | 226 | 276   | 336 | 378   | 391 | 224  |
| 75°  | 125 | 182   | 247 | 291   | 304 | 132  |
| 85°  | 37  | 100   | 165 | 208   | 222 | 39   |
| 90°  | 10  | 73    | 141 | 183   | 196 | 8    |
| 95°  | 29  | 66    | 130 | 170   | 182 | 31   |
| 105° | 103 | 142   | 107 | 146   | 159 | 111  |
| 115° | 190 | 206   | 260 | 141   | 129 | 186  |
| 125° | 264 | 268   | 307 | 337   | 347 | 236  |
| 135° | 325 | 330   | 344 | 368   | 376 | 252  |
| 145° | 376 | 376   | 381 | 390   | 393 | 236  |
| 155° | 414 | 411   | 415 | 417   | 415 | 191  |
| 165° | 436 | 435   | 436 | 438   | 436 | 123  |
| 175° | 446 | 444   | 445 | 447   | 444 | 42   |
| 180° | 446 | 446   | 446 | 446   | 446 |      |

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**CANDELA DISTRIBUTION (FULL):**

|        | 0°    | 22.5° | 45°   | 67.5° | 90°   |
|--------|-------|-------|-------|-------|-------|
| 0°     | 702.1 | 702.1 | 702.1 | 702.1 | 702.1 |
| 2.5°   | 707.2 | 704.1 | 697.0 | 702.1 | 700.1 |
| 5°     | 704.1 | 701.1 | 695.0 | 701.1 | 700.1 |
| 7.5°   | 699.1 | 697.0 | 691.9 | 699.1 | 698.0 |
| 10°    | 693.0 | 690.9 | 687.9 | 696.0 | 695.0 |
| 12.5°  | 682.8 | 683.8 | 681.8 | 689.9 | 688.9 |
| 15°    | 671.6 | 673.6 | 673.6 | 682.8 | 681.8 |
| 17.5°  | 657.3 | 661.4 | 664.5 | 673.6 | 673.6 |
| 20°    | 643.1 | 648.2 | 652.2 | 663.4 | 663.4 |
| 22.5°  | 627.8 | 633.9 | 640.0 | 651.2 | 653.3 |
| 25°    | 610.5 | 617.7 | 626.8 | 639.0 | 642.1 |
| 27.5°  | 590.2 | 601.4 | 611.5 | 626.8 | 628.8 |
| 30°    | 569.8 | 583.1 | 596.3 | 612.6 | 615.6 |
| 32.5°  | 547.4 | 562.7 | 579.0 | 598.3 | 604.4 |
| 35°    | 526.1 | 543.4 | 562.7 | 585.1 | 592.2 |
| 37.5°  | 502.7 | 522.0 | 546.4 | 570.8 | 578.0 |
| 40°    | 479.3 | 501.7 | 529.1 | 555.6 | 564.7 |
| 42.5°  | 456.9 | 479.3 | 511.8 | 541.3 | 550.5 |
| 45°    | 431.4 | 458.9 | 494.5 | 526.1 | 536.2 |
| 47.5°  | 407.0 | 436.5 | 477.2 | 509.8 | 521.0 |
| 50°    | 381.6 | 413.1 | 458.9 | 493.5 | 504.7 |
| 52.5°  | 357.2 | 390.7 | 439.6 | 475.2 | 487.4 |
| 55°    | 330.7 | 367.3 | 420.2 | 456.9 | 470.1 |
| 57.5°  | 305.3 | 346.0 | 398.9 | 438.6 | 451.8 |
| 60°    | 277.8 | 321.5 | 379.5 | 418.2 | 432.5 |
| 62.5°  | 253.4 | 299.2 | 357.2 | 398.9 | 412.1 |
| 65°    | 225.9 | 275.8 | 335.8 | 377.5 | 390.7 |
| 67.5°  | 201.5 | 253.4 | 314.4 | 356.1 | 370.4 |
| 70°    | 175.0 | 227.9 | 291.0 | 334.8 | 347.0 |
| 72.5°  | 150.6 | 205.5 | 269.7 | 312.4 | 327.7 |
| 75°    | 125.2 | 182.1 | 247.3 | 291.0 | 304.2 |
| 77.5°  | 100.7 | 159.8 | 225.9 | 269.7 | 283.9 |
| 80°    | 76.3  | 138.4 | 204.5 | 247.3 | 261.5 |
| 82.5°  | 56.0  | 117.0 | 184.2 | 226.9 | 240.1 |
| 85°    | 36.6  | 99.7  | 164.8 | 207.6 | 221.8 |
| 87.5°  | 22.4  | 83.4  | 148.6 | 190.3 | 203.5 |
| 90°    | 10.5  | 73.1  | 140.7 | 183.1 | 195.9 |
| 92.5°  | 17.3  | 69.9  | 132.9 | 173.2 | 185.8 |
| 95°    | 29.1  | 66.3  | 129.6 | 169.9 | 181.8 |
| 97.5°  | 44.8  | 62.2  | 126.3 | 164.9 | 177.5 |
| 100°   | 64.2  | 57.7  | 120.2 | 160.4 | 172.2 |
| 102.5° | 84.4  | 117.4 | 113.6 | 153.9 | 166.0 |
| 105°   | 103.1 | 142.3 | 107.2 | 146.3 | 158.8 |
| 107.5° | 126.0 | 158.5 | 100.7 | 138.9 | 151.3 |
| 110°   | 146.9 | 174.0 | 130.7 | 131.0 | 143.5 |



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**CANDELA DISTRIBUTION (continued):**

|        | 0°    | 22.5° | 45°   | 67.5° | 90°   |
|--------|-------|-------|-------|-------|-------|
| 112.5° | 167.6 | 189.7 | 231.0 | 124.5 | 136.7 |
| 115°   | 189.5 | 206.2 | 260.0 | 141.2 | 129.2 |
| 117.5° | 207.5 | 222.0 | 270.2 | 254.7 | 180.4 |
| 120°   | 228.8 | 237.6 | 284.1 | 316.5 | 284.2 |
| 122.5° | 246.8 | 253.0 | 297.0 | 326.5 | 336.0 |
| 125°   | 264.1 | 268.3 | 307.0 | 336.8 | 346.9 |
| 127.5° | 280.9 | 284.4 | 316.7 | 345.3 | 354.9 |
| 130°   | 296.7 | 300.8 | 325.8 | 353.7 | 361.5 |
| 132.5° | 312.8 | 316.0 | 334.8 | 361.1 | 368.9 |
| 135°   | 325.3 | 330.5 | 343.6 | 368.2 | 375.7 |
| 137.5° | 339.5 | 343.4 | 351.7 | 374.2 | 380.5 |
| 140°   | 353.4 | 355.0 | 360.5 | 379.7 | 384.2 |
| 142.5° | 365.0 | 366.2 | 370.4 | 385.2 | 388.7 |
| 145°   | 376.2 | 375.9 | 381.4 | 389.8 | 393.2 |
| 147.5° | 386.9 | 385.9 | 391.4 | 394.0 | 395.8 |
| 150°   | 397.2 | 394.9 | 400.1 | 402.0 | 400.4 |
| 152.5° | 405.9 | 403.3 | 408.2 | 410.1 | 407.8 |
| 155°   | 414.3 | 411.4 | 415.3 | 417.2 | 414.6 |
| 157.5° | 421.1 | 418.5 | 421.4 | 423.6 | 421.1 |
| 160°   | 426.9 | 424.9 | 426.9 | 428.8 | 426.5 |
| 162.5° | 432.0 | 430.1 | 431.7 | 434.0 | 431.0 |
| 165°   | 436.5 | 434.6 | 435.6 | 437.8 | 435.6 |
| 167.5° | 440.1 | 438.1 | 439.1 | 441.4 | 438.5 |
| 170°   | 443.0 | 441.0 | 441.7 | 443.9 | 441.0 |
| 172.5° | 444.9 | 443.0 | 443.6 | 445.9 | 443.0 |
| 175°   | 446.5 | 444.3 | 444.9 | 447.2 | 443.9 |
| 177.5° | 447.2 | 444.9 | 445.2 | 447.5 | 444.6 |
| 180°   | 445.6 | 445.6 | 445.6 | 445.6 | 445.6 |

(END OF REPORT)