

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: P1009257

Luminaire Tested: S122DIP-B675D330UB27-4F0-XX-W2A-D4

Issue Date: 5/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1009257  
REPORT IS A COMBINATION OF REPORTS P984483 AND P1007351  
Test Lab: INNOVATION CENTER  
Issue Date: 5/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S122DIP-B675D330UB27-4F0-XX-W2A-D4  
Description: Define 2 Direct/Indirect Pendant with 2700K BioUP LEDs {m-DER=0.473} {m-EER=0.52}  
Light Source: -  
Ballast/Driver: -

**Summary**

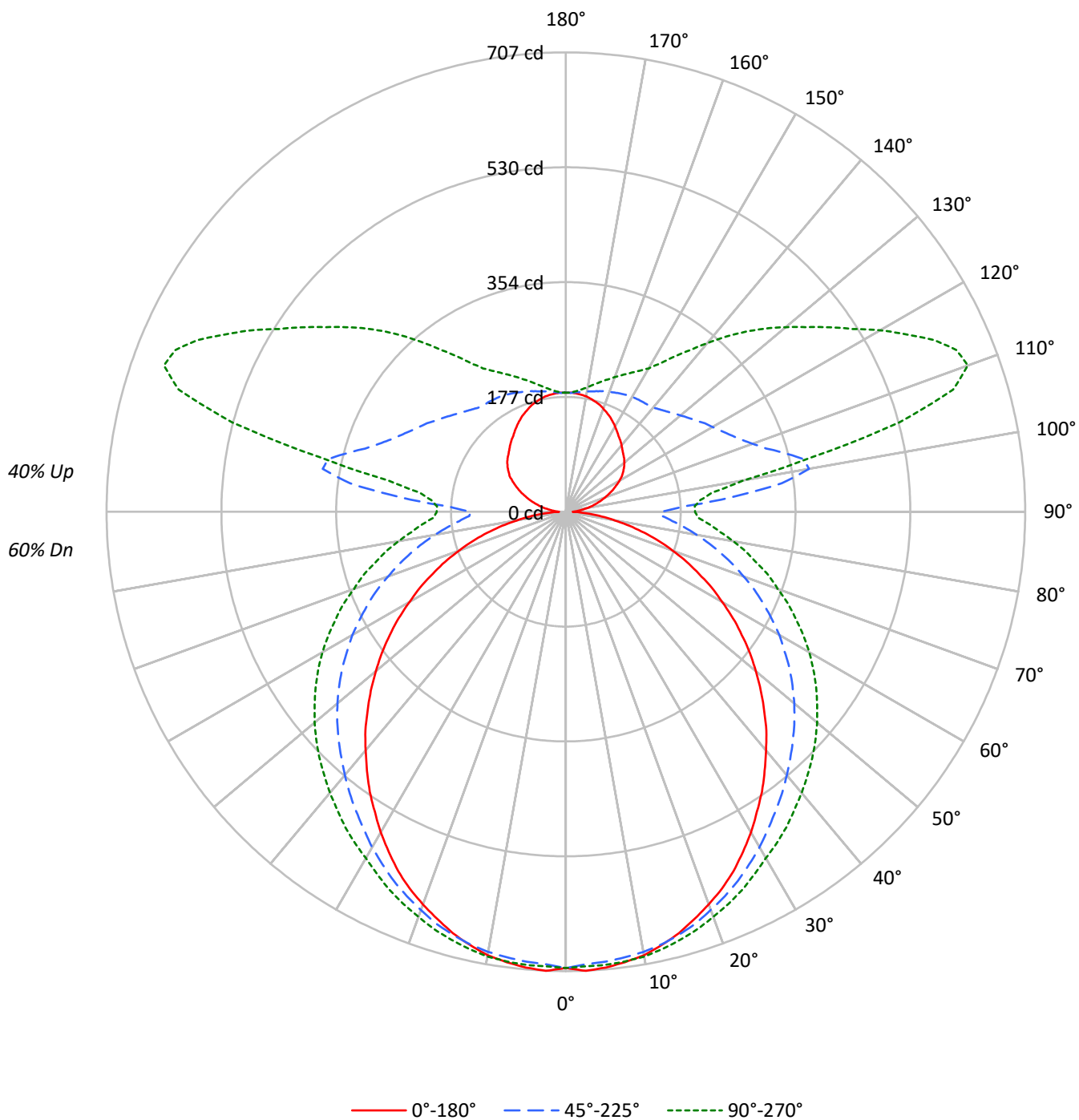
Lumens per Lamp: N/A  
Luminaire Lumens: 3957.5 lumens  
Efficiency: N/A  
Efficacy: 87.6 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.31 / 1.42  
Luminous Opening: Rectangular w/ Sides (W: 0.17' x L: 4' x H: 0.1')  
CIE Type: Semi-Direct

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

TEST NUMBER: P1009257

CATALOG NUMBER: S122DIP-B675D330UB27-4F0-XX-W2A-D4

### Luminous Intensity Polar Plot



TEST NUMBER: P1009257

CATALOG NUMBER: S122DIP-B675D330UB27-4F0-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 |
| RCR |     |     |     |     |     |     |     |     |    |    |    |    |    |    |    |    |    |
| 0   | 110 | 110 | 110 | 110 | 102 | 102 | 102 | 102 | 89 | 89 | 89 | 77 | 77 | 77 | 65 | 65 | 65 |
| 1   | 98  | 93  | 88  | 84  | 91  | 87  | 83  | 79  | 75 | 72 | 69 | 65 | 62 | 60 | 55 | 53 | 52 |
| 2   | 89  | 80  | 73  | 67  | 82  | 75  | 69  | 64  | 65 | 60 | 56 | 56 | 52 | 49 | 47 | 45 | 42 |
| 3   | 81  | 70  | 62  | 55  | 75  | 65  | 58  | 52  | 57 | 51 | 46 | 49 | 44 | 41 | 41 | 38 | 35 |
| 4   | 73  | 62  | 53  | 46  | 68  | 58  | 50  | 44  | 50 | 44 | 39 | 43 | 38 | 34 | 37 | 33 | 30 |
| 5   | 67  | 55  | 46  | 39  | 62  | 51  | 43  | 37  | 45 | 38 | 33 | 39 | 33 | 29 | 33 | 29 | 26 |
| 6   | 62  | 49  | 40  | 34  | 57  | 46  | 38  | 32  | 40 | 34 | 29 | 35 | 30 | 26 | 30 | 26 | 22 |
| 7   | 57  | 44  | 36  | 30  | 53  | 41  | 34  | 28  | 36 | 30 | 25 | 32 | 26 | 23 | 27 | 23 | 20 |
| 8   | 53  | 40  | 32  | 26  | 49  | 38  | 30  | 25  | 33 | 27 | 22 | 29 | 24 | 20 | 25 | 21 | 18 |
| 9   | 49  | 37  | 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

TEST NUMBER: P1009257

CATALOG NUMBER: S122DIP-B675D330UB27-4F0-XX-W2A-D4

**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  | 8.9       |
| 40°-50°   | 379.0  | 9.6       |
| 50°-60°   | 368.0  | 9.3       |
| 60°-70°   | 321.4  | 8.1       |
| 70°-80°   | 247.4  | 6.3       |
| 80°-90°   | 166.8  | 4.2       |
| 90°-100°  | 188.6  | 4.8       |
| 100°-110° | 334.5  | 8.5       |
| 110°-120° | 319.0  | 8.1       |
| 120°-130° | 247.7  | 6.3       |
| 130°-140° | 187.3  | 4.7       |
| 140°-150° | 133.9  | 3.4       |
| 150°-160° | 92.6   | 2.3       |
| 160°-170° | 54.5   | 1.4       |
| 170°-180° | 17.7   | 0.4       |
| 0°-30°    | 546.7  | 13.8      |
| 0°-40°    | 898.9  | 22.7      |
| 0°-60°    | 1645.9 | 41.6      |
| 0°-90°    | 2381.5 | 60.2      |
| 90°-120°  | 842.1  | 21.3      |
| 90°-150°  | 1411.1 | 35.7      |
| 90°-180°  | 1576.0 | 39.8      |
| 0°-180°   | 3957.5 | 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°  | 11  | 74    | 146 | 186   | 199 | 8    |
| 95°  | 20  | 86    | 255 | 208   | 208 | 19   |
| 105° | 48  | 99    | 349 | 590   | 531 | 51   |
| 115° | 80  | 111   | 280 | 542   | 625 | 79   |
| 125° | 108 | 127   | 245 | 427   | 495 | 96   |
| 135° | 125 | 149   | 219 | 340   | 392 | 97   |
| 145° | 142 | 163   | 206 | 262   | 292 | 89   |
| 155° | 161 | 174   | 200 | 227   | 236 | 74   |
| 165° | 176 | 181   | 192 | 204   | 207 | 49   |
| 175° | 183 | 183   | 185 | 187   | 186 | 17   |
| 180° | 183 | 183   | 183 | 183   | 183 |      |

TEST NUMBER: P1009257

CATALOG NUMBER: S122DIP-B675D330UB27-4F0-XX-W2A-D4

**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°    | 10.6  | 74.0  | 146.3 | 186.4 | 198.8 |
| 92.5°  | 14.5  | 79.8  | 179.5 | 189.8 | 198.6 |
| 95°    | 20.4  | 86.3  | 255.1 | 207.8 | 208.1 |
| 97.5°  | 25.4  | 90.8  | 335.0 | 252.2 | 227.1 |
| 100°   | 34.2  | 93.8  | 380.1 | 347.8 | 276.7 |
| 102.5° | 41.3  | 96.8  | 374.7 | 483.6 | 388.4 |
| 105°   | 48.1  | 99.4  | 348.6 | 589.7 | 531.4 |
| 107.5° | 56.5  | 102.0 | 323.8 | 623.0 | 625.1 |
| 110°   | 64.0  | 104.9 | 305.8 | 608.2 | 658.4 |



TEST NUMBER: P1009257

CATALOG NUMBER: S122DIP-B675D330UB27-4F0-XX-W2A-D4

**CANDELA DISTRIBUTION (continued):**

|        | 0°    | 22.5° | 45°   | 67.5° | 90°   |
|--------|-------|-------|-------|-------|-------|
| 112.5° | 71.7  | 108.5 | 290.9 | 578.3 | 650.6 |
| 115°   | 79.8  | 111.0 | 279.5 | 542.4 | 625.3 |
| 117.5° | 87.3  | 114.4 | 269.5 | 508.6 | 591.0 |
| 120°   | 95.1  | 117.8 | 260.9 | 476.7 | 558.9 |
| 122.5° | 102.5 | 122.3 | 253.4 | 451.1 | 523.7 |
| 125°   | 107.7 | 127.0 | 244.6 | 427.3 | 495.0 |
| 127.5° | 113.0 | 132.6 | 237.4 | 404.8 | 466.8 |
| 130°   | 117.6 | 138.4 | 230.6 | 383.3 | 442.1 |
| 132.5° | 121.8 | 144.0 | 224.2 | 361.2 | 417.7 |
| 135°   | 125.0 | 149.0 | 218.7 | 339.5 | 392.0 |
| 137.5° | 128.9 | 153.2 | 213.6 | 317.5 | 365.9 |
| 140°   | 133.5 | 156.1 | 209.2 | 297.4 | 339.0 |
| 142.5° | 138.0 | 159.2 | 207.2 | 278.7 | 313.2 |
| 145°   | 141.6 | 162.8 | 206.5 | 262.4 | 291.6 |
| 147.5° | 146.6 | 165.6 | 205.4 | 248.3 | 270.8 |
| 150°   | 151.5 | 168.4 | 204.3 | 239.6 | 254.7 |
| 152.5° | 156.4 | 171.2 | 202.6 | 233.0 | 244.5 |
| 155°   | 161.0 | 173.8 | 200.5 | 226.8 | 235.7 |
| 157.5° | 164.9 | 176.0 | 198.4 | 220.7 | 227.9 |
| 160°   | 168.8 | 178.1 | 196.2 | 214.8 | 220.5 |
| 162.5° | 172.6 | 179.7 | 194.5 | 209.1 | 213.5 |
| 165°   | 175.5 | 180.8 | 192.0 | 203.6 | 206.8 |
| 167.5° | 177.9 | 181.8 | 189.9 | 198.7 | 200.5 |
| 170°   | 180.4 | 182.3 | 188.1 | 194.2 | 194.8 |
| 172.5° | 181.8 | 182.8 | 186.0 | 190.0 | 190.2 |
| 175°   | 182.8 | 183.0 | 184.6 | 186.9 | 186.4 |
| 177.5° | 183.6 | 183.2 | 183.2 | 184.6 | 183.6 |
| 180°   | 183.2 | 183.2 | 183.2 | 183.2 | 183.2 |

(END OF REPORT)