

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: P995816

Luminaire Tested: S122DRP-B485DB30-4F0-XX-W2A-D

Issue Date: 5/2/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P995816  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-14)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/2/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S122DRP-B485DB30-4F0-XX-W2A-D  
Description: Define 2 Direct Perimeter with 3000K BioUP LEDs {m-DER=0.589} {m-EER=0.647}  
Light Source: -  
Ballast/Driver: -

**Summary**

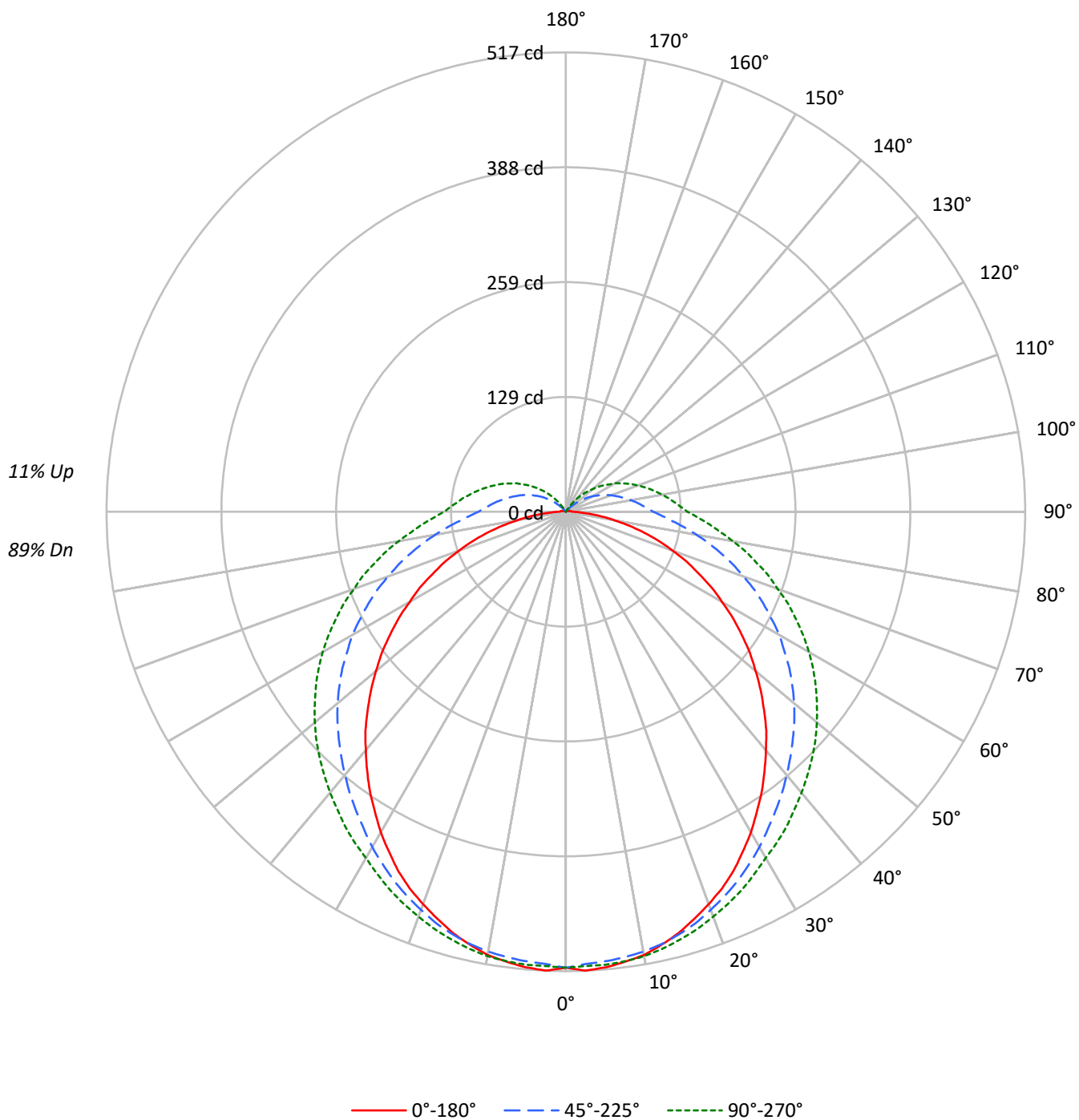
Lumens per Lamp: N/A  
Luminaire Lumens: 1958.0 lumens  
Efficiency: N/A  
Efficacy: 81.6 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.31 / 1.42  
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')  
CIE Type: Semi-Direct

Input Watts (W): 24  
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: P995816

CATALOG NUMBER: S122DRP-B485DB30-4F0-XX-W2A-D

### Luminous Intensity Polar Plot



TEST NUMBER: P995816

CATALOG NUMBER: S122DRP-B485DB30-4F0-XX-W2A-D

**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   | 116 | 116 | 116 | 116 | 112 | 112 | 112 | 112 | 105 | 105 | 105 | 98 | 98 | 98 | 92 | 92 | 92 |
| 1   | 104 | 98  | 93  | 88  | 100 | 95  | 90  | 86  | 88  | 85  | 81  | 82 | 79 | 77 | 77 | 75 | 72 |
| 2   | 94  | 84  | 77  | 70  | 90  | 81  | 74  | 68  | 76  | 70  | 65  | 71 | 66 | 62 | 66 | 62 | 59 |
| 3   | 85  | 73  | 64  | 57  | 81  | 71  | 63  | 56  | 66  | 59  | 54  | 62 | 56 | 51 | 58 | 53 | 49 |
| 4   | 77  | 64  | 55  | 48  | 74  | 62  | 54  | 47  | 58  | 51  | 45  | 55 | 48 | 43 | 51 | 46 | 42 |
| 5   | 71  | 57  | 48  | 41  | 68  | 56  | 47  | 40  | 52  | 44  | 39  | 49 | 42 | 37 | 46 | 40 | 36 |
| 6   | 65  | 51  | 42  | 35  | 63  | 50  | 41  | 35  | 47  | 39  | 34  | 44 | 37 | 32 | 42 | 36 | 31 |
| 7   | 60  | 46  | 37  | 31  | 58  | 45  | 37  | 31  | 43  | 35  | 30  | 40 | 34 | 29 | 38 | 32 | 28 |
| 8   | 56  | 42  | 34  | 28  | 54  | 41  | 33  | 27  | 39  | 32  | 26  | 37 | 30 | 25 | 35 | 29 | 25 |
| 9   | 52  | 39  | 30  | 25  | 50  | 38  | 30  | 24  | 36  | 29  | 24  | 34 | 27 | 23 | 32 | 26 | 22 |
| 10  | 49  | 36  | 28  | 22  | 47  | 35  | 27  | 22  | 33  | 26  | 21  | 31 | 25 | 21 | 30 | 24 | 20 |

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

|     | 0°   | 45°   | 90°   |
|-----|------|-------|-------|
| 0°  | 8122 | 8122  | 8122  |
| 5°  | 8177 | 8070  | 8131  |
| 10° | 8141 | 8080  | 8164  |
| 15° | 8043 | 8068  | 8166  |
| 20° | 7917 | 8030  | 8168  |
| 25° | 7793 | 8001  | 8197  |
| 30° | 7613 | 7966  | 8223  |
| 35° | 7430 | 7948  | 8363  |
| 40° | 7238 | 7991  | 8530  |
| 45° | 7058 | 8090  | 8773  |
| 50° | 6868 | 8260  | 9085  |
| 55° | 6670 | 8475  | 9483  |
| 60° | 6427 | 8782  | 10007 |
| 65° | 6184 | 9192  | 10697 |
| 70° | 5919 | 9844  | 11737 |
| 75° | 5596 | 11052 | 13602 |
| 80° | 5087 | 13628 | 17420 |
| 85° | 4867 | 21885 | 29441 |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°

Vertical Angle: 87.5°

Luminance: 53963 cd/sqm

TEST NUMBER: P995816

CATALOG NUMBER: S122DRP-B485DB30-4F0-XX-W2A-D

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 48.6   | 2.5       |
| 10°-20°   | 139.5  | 7.1       |
| 20°-30°   | 211.4  | 10.8      |
| 30°-40°   | 257.4  | 13.1      |
| 40°-50°   | 277.0  | 14.1      |
| 50°-60°   | 269.0  | 13.7      |
| 60°-70°   | 234.9  | 12.0      |
| 70°-80°   | 180.8  | 9.2       |
| 80°-90°   | 121.1  | 6.2       |
| 90°-100°  | 83.5   | 4.3       |
| 100°-110° | 61.0   | 3.1       |
| 110°-120° | 40.3   | 2.1       |
| 120°-130° | 22.4   | 1.1       |
| 130°-140° | 9.4    | 0.5       |
| 140°-150° | 1.6    | 0.1       |
| 150°-160° | 0.0    | 0.0       |
| 160°-170° | 0.0    | 0.0       |
| 170°-180° | 0.0    | 0.0       |
| 0°-30°    | 399.6  | 20.4      |
| 0°-40°    | 657.0  | 33.6      |
| 0°-60°    | 1202.9 | 61.4      |
| 0°-90°    | 1739.7 | 88.9      |
| 90°-120°  | 184.8  | 9.4       |
| 90°-150°  | 218.3  | 11.1      |
| 90°-180°  | 218.0  | 11.1      |
| 0°-180°   | 1958.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|      | 0°  | 22.5° | 45° | 67.5° | 90° | Flux |
|------|-----|-------|-----|-------|-----|------|
| 0°   | 513 | 513   | 513 | 513   | 513 |      |
| 5°   | 515 | 512   | 508 | 512   | 512 | 49   |
| 15°  | 491 | 492   | 492 | 499   | 498 | 138  |
| 25°  | 446 | 451   | 458 | 467   | 469 | 205  |
| 35°  | 384 | 397   | 411 | 428   | 433 | 240  |
| 45°  | 315 | 335   | 361 | 384   | 392 | 243  |
| 55°  | 242 | 268   | 307 | 334   | 344 | 216  |
| 65°  | 165 | 202   | 245 | 276   | 286 | 164  |
| 75°  | 92  | 133   | 181 | 213   | 222 | 97   |
| 85°  | 27  | 73    | 120 | 152   | 162 | 28   |
| 90°  | 7   | 51    | 98  | 128   | 137 | 5    |
| 95°  | 6   | 41    | 86  | 114   | 123 | 5    |
| 105° | 4   | 25    | 64  | 90    | 98  | 4    |
| 115° | 3   | 11    | 45  | 67    | 75  | 3    |
| 125° | 2   | 2     | 25  | 45    | 52  | 2    |
| 135° | 1   | 1     | 8   | 24    | 30  | 1    |
| 145° | 0   | 0     | 0   | 4     | 8   | 0    |
| 155° | 0   | 0     | 0   | 0     | 0   | 0    |
| 165° | 0   | 0     | 0   | 0     | 0   | 0    |
| 175° | 0   | 0     | 0   | 0     | 0   | 0    |
| 180° | 0   | 0     | 0   | 0     | 0   | 0    |

TEST NUMBER: P995816

CATALOG NUMBER: S122DRP-B485DB30-4F0-XX-W2A-D

**CANDELA DISTRIBUTION (FULL):**

|        | 0°    | 22.5° | 45°   | 67.5° | 90°   |
|--------|-------|-------|-------|-------|-------|
| 0°     | 513.1 | 513.1 | 513.1 | 513.1 | 513.1 |
| 2.5°   | 516.9 | 514.6 | 509.4 | 513.1 | 511.7 |
| 5°     | 514.6 | 512.4 | 507.9 | 512.4 | 511.7 |
| 7.5°   | 510.9 | 509.4 | 505.7 | 510.9 | 510.2 |
| 10°    | 506.5 | 505.0 | 502.7 | 508.7 | 507.9 |
| 12.5°  | 499.0 | 499.8 | 498.3 | 504.2 | 503.5 |
| 15°    | 490.8 | 492.3 | 492.3 | 499.0 | 498.3 |
| 17.5°  | 480.4 | 483.4 | 485.6 | 492.3 | 492.3 |
| 20°    | 470.0 | 473.7 | 476.7 | 484.9 | 484.9 |
| 22.5°  | 458.9 | 463.3 | 467.8 | 476.0 | 477.5 |
| 25°    | 446.2 | 451.4 | 458.1 | 467.0 | 469.3 |
| 27.5°  | 431.3 | 439.5 | 447.0 | 458.1 | 459.6 |
| 30°    | 416.5 | 426.1 | 435.8 | 447.7 | 449.9 |
| 32.5°  | 400.1 | 411.3 | 423.2 | 437.3 | 441.8 |
| 35°    | 384.5 | 397.1 | 411.3 | 427.6 | 432.8 |
| 37.5°  | 367.4 | 381.5 | 399.4 | 417.2 | 422.4 |
| 40°    | 350.3 | 366.6 | 386.7 | 406.1 | 412.8 |
| 42.5°  | 333.9 | 350.3 | 374.1 | 395.6 | 402.3 |
| 45°    | 315.3 | 335.4 | 361.4 | 384.5 | 391.9 |
| 47.5°  | 297.5 | 319.0 | 348.8 | 372.6 | 380.8 |
| 50°    | 278.9 | 301.9 | 335.4 | 360.7 | 368.9 |
| 52.5°  | 261.0 | 285.6 | 321.3 | 347.3 | 356.2 |
| 55°    | 241.7 | 268.5 | 307.1 | 333.9 | 343.6 |
| 57.5°  | 223.1 | 252.9 | 291.5 | 320.5 | 330.2 |
| 60°    | 203.0 | 235.0 | 277.4 | 305.7 | 316.1 |
| 62.5°  | 185.2 | 218.6 | 261.0 | 291.5 | 301.2 |
| 65°    | 165.1 | 201.5 | 245.4 | 275.9 | 285.6 |
| 67.5°  | 147.3 | 185.2 | 229.8 | 260.3 | 270.7 |
| 70°    | 127.9 | 166.6 | 212.7 | 244.7 | 253.6 |
| 72.5°  | 110.1 | 150.2 | 197.1 | 228.3 | 239.5 |
| 75°    | 91.5  | 133.1 | 180.7 | 212.7 | 222.4 |
| 77.5°  | 73.6  | 116.8 | 165.1 | 197.1 | 207.5 |
| 80°    | 55.8  | 101.1 | 149.5 | 180.7 | 191.1 |
| 82.5°  | 40.9  | 85.5  | 134.6 | 165.8 | 175.5 |
| 85°    | 26.8  | 72.9  | 120.5 | 151.7 | 162.1 |
| 87.5°  | 16.4  | 61.0  | 108.6 | 139.1 | 148.7 |
| 90°    | 7.4   | 50.6  | 98.2  | 127.9 | 136.8 |
| 92.5°  | 6.7   | 46.1  | 91.5  | 120.5 | 129.4 |
| 95°    | 5.9   | 40.9  | 85.5  | 113.8 | 122.7 |
| 97.5°  | 5.2   | 37.2  | 80.3  | 107.8 | 116.8 |
| 100°   | 5.2   | 32.7  | 74.4  | 101.9 | 110.1 |
| 102.5° | 4.5   | 29.0  | 69.2  | 95.9  | 104.1 |
| 105°   | 3.7   | 25.3  | 64.0  | 90.0  | 98.2  |
| 107.5° | 3.7   | 21.6  | 58.8  | 84.0  | 92.2  |
| 110°   | 3.0   | 17.8  | 54.3  | 78.1  | 86.3  |

TEST NUMBER: P995816

CATALOG NUMBER: S122DRP-B485DB30-4F0-XX-W2A-D

**CANDELA DISTRIBUTION (continued):**

|        | 0°  | 22.5° | 45°  | 67.5° | 90°  |
|--------|-----|-------|------|-------|------|
| 112.5° | 3.0 | 14.9  | 49.1 | 72.9  | 81.1 |
| 115°   | 3.0 | 11.2  | 44.6 | 66.9  | 75.1 |
| 117.5° | 2.2 | 8.2   | 39.4 | 61.7  | 69.2 |
| 120°   | 2.2 | 5.2   | 35.0 | 55.8  | 64.0 |
| 122.5° | 2.2 | 3.0   | 30.5 | 50.6  | 57.3 |
| 125°   | 1.5 | 1.5   | 25.3 | 45.4  | 52.1 |
| 127.5° | 1.5 | 0.7   | 20.8 | 39.4  | 46.1 |
| 130°   | 1.5 | 0.7   | 16.4 | 34.2  | 40.2 |
| 132.5° | 1.5 | 0.7   | 11.9 | 29.0  | 35.0 |
| 135°   | 0.7 | 0.7   | 8.2  | 23.8  | 29.7 |
| 137.5° | 0.7 | 0.7   | 4.5  | 18.6  | 23.8 |
| 140°   | 0.7 | 0.0   | 1.5  | 13.4  | 17.8 |
| 142.5° | 0.7 | 0.0   | 0.0  | 8.9   | 12.6 |
| 145°   | 0.0 | 0.0   | 0.0  | 4.5   | 8.2  |
| 147.5° | 0.0 | 0.0   | 0.0  | 0.7   | 3.0  |
| 150°   | 0.0 | 0.0   | 0.0  | 0.0   | 0.0  |
| 152.5° | 0.0 | 0.0   | 0.0  | 0.0   | 0.0  |
| 155°   | 0.0 | 0.0   | 0.0  | 0.0   | 0.0  |
| 157.5° | 0.0 | 0.0   | 0.0  | 0.0   | 0.0  |
| 160°   | 0.0 | 0.0   | 0.0  | 0.0   | 0.0  |
| 162.5° | 0.0 | 0.0   | 0.0  | 0.0   | 0.0  |
| 165°   | 0.0 | 0.0   | 0.0  | 0.0   | 0.0  |
| 167.5° | 0.0 | 0.0   | 0.0  | 0.0   | 0.0  |
| 170°   | 0.0 | 0.0   | 0.0  | 0.0   | 0.0  |
| 172.5° | 0.0 | 0.0   | 0.0  | 0.0   | 0.0  |
| 175°   | 0.0 | 0.0   | 0.0  | 0.0   | 0.0  |
| 177.5° | 0.0 | 0.0   | 0.0  | 0.0   | 0.0  |
| 180°   | 0.0 | 0.0   | 0.0  | 0.0   | 0.0  |

(END OF REPORT)