

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



Scaled data based on original data using
LM-79-2024 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: NEO-RAY

Report Number: P1217500

Luminaire Tested: S125DRP-S485D835-X4F0-XX-UDD-G-W

Issue Date: 4/9/2026

Test Information

Test Method: LM-79-2024
Report Number: P1217500
TEST IS SCALED FROM IESNA LM-79-24 TEST DATA (G2-2511-596-4)
Test Lab: INNOVATION CENTER
Issue Date: 4/9/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125DRP-S485D835-X4F0-XX-UDD-G-W
Description: DEFINE 5, DIRECT RECESSED WITH GRAZE FLUSH OPTIC
CORE LIGHT ENGINE
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

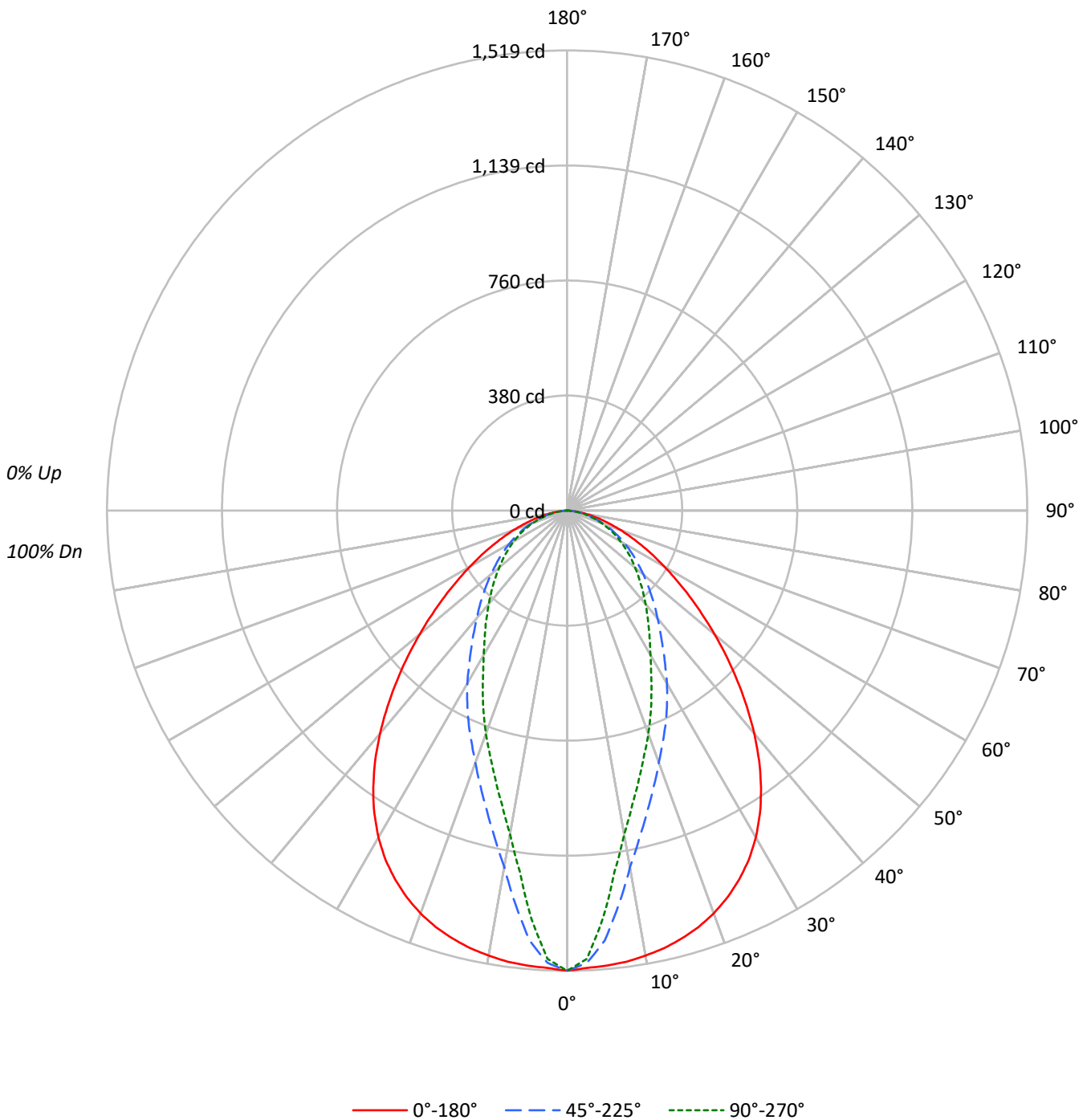
Lumens per Lamp: N/A
Luminaire Lumens: 2163.0 lumens
Efficiency: N/A
Efficacy: 113.2 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 0.6 / 0.87
Luminous Opening: Rectangular (W 0.39' x L: 3.9' x H: 0')
CIE Type: Direct

Input Watts (W): 19.1
Input Voltage (V): 120
Input Current (A_{in}): 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





TEST NUMBER: P1217500

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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 | 50 | 30 | 10 | 0 | | |
| RCR | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0 | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | 106 | 106 | 106 | 102 | 102 | 102 | 100 | | | | | 100 | | | |
| 1 | 110 | 106 | 102 | 99 | 108 | 104 | 100 | 97 | 100 | 97 | 94 | 96 | 94 | 92 | 92 | 90 | 89 | | | | | 87 | | | | |
| 2 | 102 | 94 | 88 | 83 | 99 | 92 | 87 | 82 | 89 | 84 | 80 | 86 | 82 | 79 | 83 | 80 | 77 | | | | | 75 | | | | |
| 3 | 94 | 84 | 77 | 71 | 91 | 83 | 76 | 71 | 80 | 74 | 69 | 77 | 72 | 68 | 75 | 71 | 67 | | | | | 65 | | | | |
| 4 | 87 | 76 | 68 | 62 | 85 | 75 | 67 | 62 | 72 | 66 | 61 | 70 | 64 | 60 | 68 | 63 | 59 | | | | | 57 | | | | |
| 5 | 80 | 69 | 61 | 55 | 78 | 68 | 60 | 54 | 66 | 59 | 54 | 64 | 58 | 53 | 62 | 57 | 53 | | | | | 51 | | | | |
| 6 | 75 | 63 | 55 | 49 | 73 | 62 | 54 | 49 | 60 | 53 | 48 | 59 | 52 | 48 | 57 | 52 | 47 | | | | | 46 | | | | |
| 7 | 70 | 58 | 50 | 44 | 68 | 57 | 49 | 44 | 55 | 49 | 44 | 54 | 48 | 43 | 53 | 47 | 43 | | | | | 41 | | | | |
| 8 | 66 | 53 | 45 | 40 | 64 | 52 | 45 | 40 | 51 | 44 | 40 | 50 | 44 | 39 | 49 | 43 | 39 | | | | | 37 | | | | |
| 9 | 62 | 49 | 42 | 37 | 60 | 49 | 41 | 36 | 48 | 41 | 36 | 47 | 40 | 36 | 46 | 40 | 36 | | | | | 34 | | | | |
| 10 | 58 | 46 | 39 | 34 | 57 | 45 | 38 | 34 | 44 | 38 | 33 | 44 | 38 | 33 | 43 | 37 | 33 | | | | | 32 | | | | |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|-------|-------|-------|
| 0° | 10735 | 10735 | 10735 |
| 5° | 10698 | 10106 | 9597 |
| 10° | 10707 | 8580 | 7786 |
| 15° | 10702 | 7501 | 6708 |
| 20° | 10645 | 6659 | 5895 |
| 25° | 10479 | 6009 | 5136 |
| 30° | 10166 | 5375 | 4490 |
| 35° | 9631 | 4747 | 4057 |
| 40° | 8868 | 4280 | 3715 |
| 45° | 7946 | 3914 | 3441 |
| 50° | 6981 | 3617 | 3219 |
| 55° | 6068 | 3360 | 3042 |
| 60° | 5240 | 3126 | 2880 |
| 65° | 4513 | 2907 | 2710 |
| 70° | 3865 | 2658 | 2501 |
| 75° | 3228 | 2316 | 2223 |
| 80° | 2548 | 1897 | 1840 |
| 85° | 1638 | 1298 | 1298 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 7946 cd/sqm



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 130.3 | 6.0 |
| 10°-20° | 307.8 | 14.2 |
| 20°-30° | 391.1 | 18.1 |
| 30°-40° | 398.3 | 18.4 |
| 40°-50° | 352.3 | 16.3 |
| 50°-60° | 276.1 | 12.8 |
| 60°-70° | 188.3 | 8.7 |
| 70°-80° | 97.0 | 4.5 |
| 80°-90° | 21.7 | 1.0 |
| 90°-100° | 0.0 | 0.0 |
| 100°-110° | 0.0 | 0.0 |
| 110°-120° | 0.0 | 0.0 |
| 120°-130° | 0.0 | 0.0 |
| 130°-140° | 0.0 | 0.0 |
| 140°-150° | 0.0 | 0.0 |
| 150°-160° | 0.0 | 0.0 |
| 160°-170° | 0.0 | 0.0 |
| 170°-180° | 0.0 | 0.0 |
| 0°-30° | 829.3 | 38.3 |
| 0°-40° | 1227.6 | 56.8 |
| 0°-60° | 1856.0 | 85.8 |
| 0°-90° | 2163.0 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 2163.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|------|-------|------|-------|------|------|
| 0° | 1519 | 1519 | 1519 | 1519 | 1519 | |
| 5° | 1508 | 1500 | 1424 | 1368 | 1352 | 143 |
| 15° | 1462 | 1237 | 1025 | 934 | 916 | 413 |
| 25° | 1343 | 954 | 770 | 679 | 658 | 617 |
| 35° | 1116 | 722 | 550 | 480 | 470 | 695 |
| 45° | 795 | 511 | 392 | 349 | 344 | 613 |
| 55° | 492 | 341 | 273 | 248 | 247 | 443 |
| 65° | 270 | 208 | 174 | 161 | 162 | 270 |
| 75° | 118 | 99 | 85 | 79 | 81 | 127 |
| 85° | 20 | 19 | 16 | 15 | 16 | 26 |
| 90° | 0 | 0 | 0 | 0 | 0 | |

TEST NUMBER: P1217500

CATALOG NUMBER: S125DRP-S485D835-X4F0-XX-UDD-G-W

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|--------|--------|--------|--------|--------|
| 0° | 1518.6 | 1518.6 | 1518.6 | 1518.6 | 1518.6 |
| 2.5° | 1511.0 | 1522.8 | 1494.3 | 1486.6 | 1481.1 |
| 5° | 1507.5 | 1499.9 | 1424.1 | 1368.4 | 1352.4 |
| 7.5° | 1501.9 | 1459.5 | 1310.0 | 1215.5 | 1200.9 |
| 10° | 1491.5 | 1396.2 | 1195.3 | 1102.8 | 1084.7 |
| 12.5° | 1479.7 | 1320.5 | 1104.9 | 1011.0 | 993.6 |
| 15° | 1462.3 | 1237.0 | 1024.9 | 933.8 | 916.5 |
| 17.5° | 1441.4 | 1157.7 | 952.6 | 862.9 | 846.2 |
| 20° | 1415.0 | 1085.4 | 885.2 | 800.3 | 783.6 |
| 22.5° | 1382.3 | 1017.3 | 825.4 | 738.5 | 720.4 |
| 25° | 1343.4 | 954.0 | 770.4 | 678.7 | 658.5 |
| 27.5° | 1298.9 | 893.5 | 714.1 | 618.9 | 599.4 |
| 30° | 1245.4 | 834.4 | 658.5 | 566.0 | 550.0 |
| 32.5° | 1184.9 | 777.4 | 601.5 | 520.1 | 506.9 |
| 35° | 1116.0 | 721.8 | 550.0 | 480.5 | 470.1 |
| 37.5° | 1040.9 | 666.8 | 505.5 | 443.6 | 434.6 |
| 40° | 961.0 | 613.3 | 463.8 | 409.6 | 402.6 |
| 42.5° | 878.2 | 561.8 | 427.6 | 379.0 | 372.7 |
| 45° | 794.8 | 511.1 | 391.5 | 349.1 | 344.2 |
| 47.5° | 713.4 | 464.5 | 359.5 | 321.9 | 317.8 |
| 50° | 634.8 | 420.7 | 328.9 | 295.5 | 292.7 |
| 52.5° | 561.1 | 379.7 | 299.0 | 271.2 | 269.8 |
| 55° | 492.3 | 341.4 | 272.6 | 247.5 | 246.8 |
| 57.5° | 429.0 | 305.3 | 246.2 | 224.6 | 224.6 |
| 60° | 370.6 | 271.2 | 221.1 | 202.3 | 203.7 |
| 62.5° | 318.5 | 238.5 | 197.5 | 181.5 | 182.9 |
| 65° | 269.8 | 207.9 | 173.8 | 160.6 | 162.0 |
| 67.5° | 226.0 | 178.7 | 150.9 | 139.8 | 141.2 |
| 70° | 187.0 | 150.9 | 128.6 | 118.9 | 121.0 |
| 72.5° | 150.9 | 125.2 | 106.4 | 98.7 | 100.8 |
| 75° | 118.2 | 99.4 | 84.8 | 79.3 | 81.4 |
| 77.5° | 89.0 | 75.8 | 65.4 | 60.5 | 62.6 |
| 80° | 62.6 | 54.2 | 46.6 | 43.1 | 45.2 |
| 82.5° | 38.9 | 34.8 | 30.6 | 27.8 | 29.2 |
| 85° | 20.2 | 18.8 | 16.0 | 14.6 | 16.0 |
| 87.5° | 7.0 | 7.0 | 6.3 | 5.6 | 6.3 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |



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CIE UGR TABLE:

| Reflectances: | | | | | | | | | | | |
|-----------------|------|------------------|-------|-------|-------|-------|----------------|-------|-------|-------|-------|
| Ceiling | | 0.7 | 0.7 | 0.5 | 0.5 | 0.3 | 0.7 | 0.7 | 0.5 | 0.5 | 0.3 |
| Wall | | 0.5 | 0.3 | 0.5 | 0.3 | 0.3 | 0.5 | 0.3 | 0.5 | 0.3 | 0.3 |
| Reference plane | | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 |
| Room dimensions | | Viewed crosswise | | | | | Viewed endwise | | | | |
| X=2H | Y=2H | 17.12 | 18.61 | 17.49 | 18.92 | 19.24 | 14.51 | 16.00 | 14.87 | 16.31 | 16.62 |
| | 3H | 18.71 | 20.04 | 19.09 | 20.37 | 20.73 | 16.15 | 17.49 | 16.53 | 17.81 | 18.18 |
| | 4H | 19.24 | 20.49 | 19.64 | 20.84 | 21.22 | 16.73 | 17.98 | 17.13 | 18.33 | 18.70 |
| | 6H | 19.58 | 20.73 | 19.99 | 21.10 | 21.49 | 17.10 | 18.26 | 17.52 | 18.62 | 19.01 |
| | 8H | 19.66 | 20.76 | 20.09 | 21.15 | 21.55 | 17.20 | 18.30 | 17.63 | 18.69 | 19.09 |
| | 12H | 19.69 | 20.74 | 20.12 | 21.12 | 21.55 | 17.24 | 18.29 | 17.67 | 18.68 | 19.11 |
| 4H | 2H | 17.36 | 18.61 | 17.76 | 18.96 | 19.34 | 15.20 | 16.44 | 15.60 | 16.79 | 17.17 |
| | 3H | 19.15 | 20.18 | 19.56 | 20.58 | 20.99 | 17.01 | 18.05 | 17.43 | 18.45 | 18.85 |
| | 4H | 19.79 | 20.73 | 20.23 | 21.14 | 21.58 | 17.68 | 18.61 | 18.11 | 19.03 | 19.47 |
| | 6H | 20.25 | 21.06 | 20.70 | 21.50 | 21.96 | 18.15 | 18.95 | 18.60 | 19.40 | 19.86 |
| | 8H | 20.36 | 21.12 | 20.83 | 21.56 | 22.03 | 18.27 | 19.02 | 18.73 | 19.47 | 19.94 |
| | 12H | 20.42 | 21.10 | 20.91 | 21.58 | 22.05 | 18.34 | 19.01 | 18.82 | 19.49 | 19.96 |
| 8H | 4H | 19.90 | 20.66 | 20.37 | 21.10 | 21.57 | 17.98 | 18.73 | 18.44 | 19.18 | 19.65 |
| | 6H | 20.43 | 21.05 | 20.93 | 21.55 | 22.02 | 18.53 | 19.15 | 19.02 | 19.64 | 20.12 |
| | 8H | 20.59 | 21.15 | 21.11 | 21.66 | 22.15 | 18.70 | 19.25 | 19.21 | 19.76 | 20.25 |
| | 12H | 20.70 | 21.19 | 21.21 | 21.68 | 22.25 | 18.81 | 19.30 | 19.32 | 19.79 | 20.36 |
| 12H | 4H | 19.89 | 20.57 | 20.38 | 21.05 | 21.52 | 18.00 | 18.68 | 18.48 | 19.15 | 19.63 |
| | 6H | 20.42 | 20.98 | 20.94 | 21.49 | 21.98 | 18.57 | 19.12 | 19.08 | 19.64 | 20.12 |
| | 8H | 20.62 | 21.12 | 21.14 | 21.61 | 22.18 | 18.78 | 19.27 | 19.29 | 19.76 | 20.33 |