

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: NEO-RAY

Report Number: P333906

Luminaire Tested: **S122RDS-S485D935-4F0-1E-UDD-F**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333906
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-24)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S122RDS-S485D935-4F0-1E-UDD-F
Description: DEFINE 2 REGRESSED DIRECT LED LUMINAIRE, FLUSH SATIN WHITE DIFFUSER
PENDANT/SURFACE/WALL MOUNT, 485 LUMENS PER FOOT
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1404.9 lumens
Efficiency: N/A
Efficacy: 74.7 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 0.99 / 1.16
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Direct

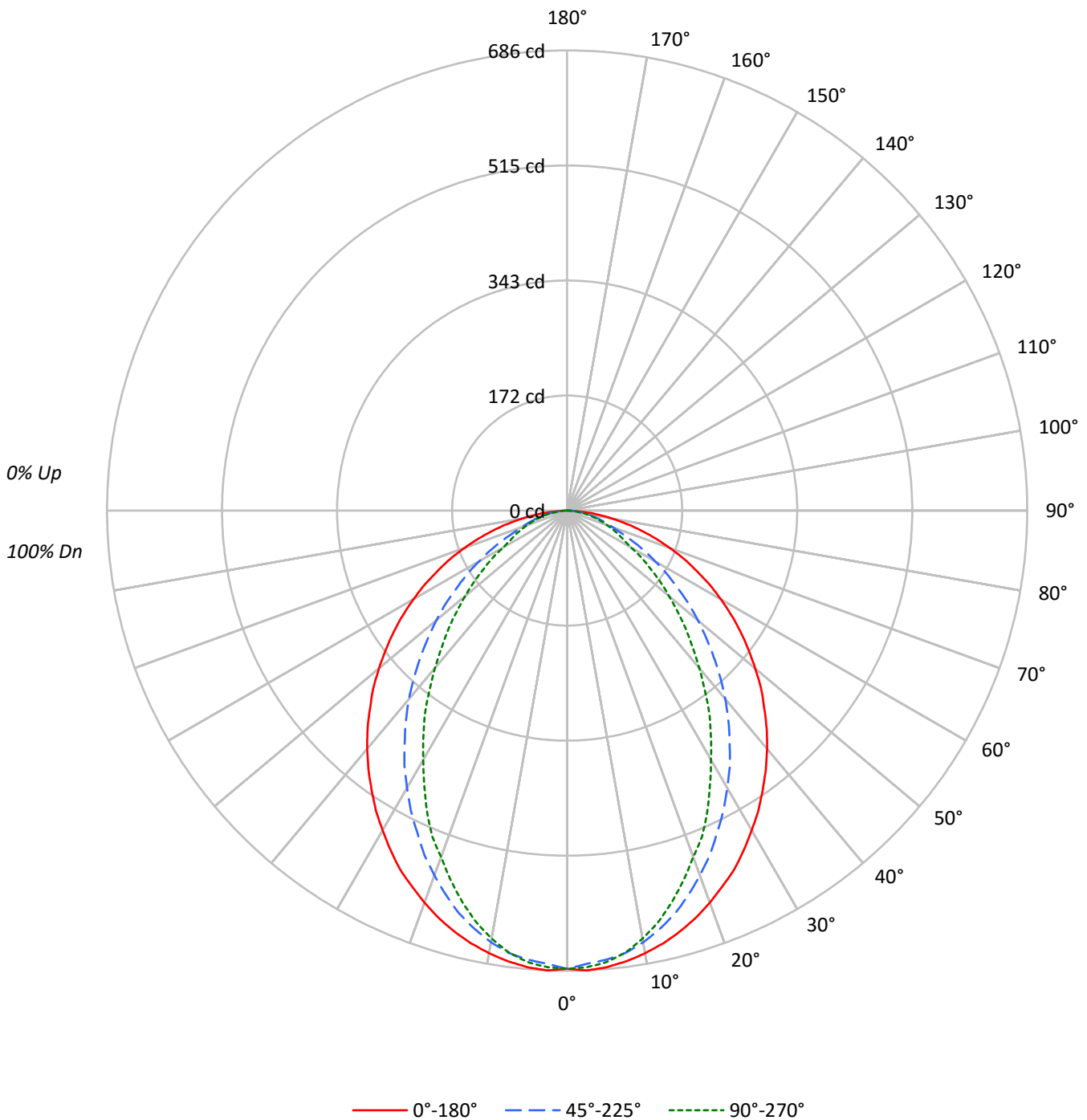
Input Watts (W): 18.8
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P333906

CATALOG NUMBER: S122RDS-S485D935-4F0-1E-UDD-F

Luminous Intensity Polar Plot





TEST NUMBER: P333906

CATALOG NUMBER: S122RDS-S485D935-4F0-1E-UDD-F

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 | 0 |
| RCR | | | | | | | | | | | | | | | | | | |
| 0 | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | 106 | 106 | 106 | 102 | 102 | 102 | 100 |
| 1 | 110 | 106 | 102 | 98 | 107 | 103 | 100 | 97 | 99 | 96 | 94 | 95 | 93 | 91 | 92 | 90 | 88 | 86 |
| 2 | 101 | 94 | 87 | 82 | 98 | 92 | 86 | 81 | 88 | 83 | 79 | 85 | 81 | 78 | 82 | 79 | 76 | 74 |
| 3 | 93 | 83 | 76 | 70 | 90 | 82 | 75 | 69 | 79 | 73 | 68 | 76 | 71 | 67 | 74 | 69 | 66 | 64 |
| 4 | 86 | 75 | 66 | 60 | 83 | 73 | 66 | 60 | 71 | 64 | 59 | 69 | 63 | 58 | 66 | 62 | 57 | 55 |
| 5 | 79 | 67 | 59 | 53 | 77 | 66 | 58 | 52 | 64 | 57 | 52 | 62 | 56 | 51 | 60 | 55 | 51 | 49 |
| 6 | 74 | 61 | 53 | 47 | 72 | 60 | 52 | 46 | 58 | 51 | 46 | 57 | 50 | 46 | 55 | 50 | 45 | 43 |
| 7 | 68 | 56 | 47 | 42 | 67 | 55 | 47 | 42 | 53 | 46 | 41 | 52 | 46 | 41 | 51 | 45 | 41 | 39 |
| 8 | 64 | 51 | 43 | 38 | 62 | 51 | 43 | 37 | 49 | 42 | 37 | 48 | 42 | 37 | 47 | 41 | 37 | 35 |
| 9 | 60 | 47 | 39 | 34 | 59 | 47 | 39 | 34 | 46 | 39 | 34 | 44 | 38 | 34 | 44 | 38 | 34 | 32 |
| 10 | 56 | 44 | 36 | 31 | 55 | 43 | 36 | 31 | 42 | 36 | 31 | 41 | 35 | 31 | 41 | 35 | 31 | 29 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|-------|-------|-------|
| 0° | 11029 | 11029 | 11029 |
| 5° | 11071 | 10891 | 10951 |
| 10° | 10986 | 10714 | 10622 |
| 15° | 10860 | 10395 | 10096 |
| 20° | 10686 | 9943 | 9443 |
| 25° | 10507 | 9428 | 8811 |
| 30° | 10258 | 8899 | 7998 |
| 35° | 10017 | 8322 | 7287 |
| 40° | 9773 | 7727 | 6462 |
| 45° | 9485 | 7058 | 5718 |
| 50° | 9193 | 6383 | 4984 |
| 55° | 8892 | 5655 | 4282 |
| 60° | 8544 | 4892 | 3552 |
| 65° | 8149 | 4111 | 3236 |
| 70° | 7676 | 3385 | 2979 |
| 75° | 7099 | 3088 | 2776 |
| 80° | 6267 | 2762 | 2529 |
| 85° | 4928 | 2167 | 2167 |



TEST NUMBER: P333906

CATALOG NUMBER: S122RDS-S485D935-4F0-1E-UDD-F

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 64.0 | 4.6 |
| 10°-20° | 175.8 | 12.5 |
| 20°-30° | 246.8 | 17.6 |
| 30°-40° | 269.0 | 19.1 |
| 40°-50° | 247.2 | 17.6 |
| 50°-60° | 194.1 | 13.8 |
| 60°-70° | 126.4 | 9.0 |
| 70°-80° | 65.1 | 4.6 |
| 80°-90° | 16.6 | 1.2 |
| 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° | 486.5 | 34.6 |
| 0°-40° | 755.5 | 53.8 |
| 0°-60° | 1196.9 | 85.2 |
| 0°-90° | 1404.9 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 1404.9 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|-----|-------|-----|-------|-----|------|
| 0° | 683 | 683 | 683 | 683 | 683 | |
| 5° | 683 | 680 | 672 | 678 | 676 | 65 |
| 15° | 650 | 643 | 622 | 610 | 604 | 183 |
| 25° | 590 | 570 | 529 | 504 | 495 | 271 |
| 35° | 508 | 477 | 422 | 383 | 370 | 318 |
| 45° | 415 | 374 | 309 | 265 | 250 | 321 |
| 55° | 316 | 268 | 201 | 164 | 152 | 282 |
| 65° | 213 | 163 | 108 | 87 | 85 | 211 |
| 75° | 114 | 70 | 50 | 45 | 44 | 120 |
| 85° | 27 | 14 | 12 | 12 | 12 | 32 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P333906

CATALOG NUMBER: S122RDS-S485D935-4F0-1E-UDD-F

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|-------|-------|-------|-------|-------|
| 0° | 683.1 | 683.1 | 683.1 | 683.1 | 683.1 |
| 2.5° | 686.2 | 683.1 | 676.3 | 682.5 | 681.3 |
| 5° | 683.1 | 680.0 | 672.0 | 677.6 | 675.7 |
| 7.5° | 677.6 | 673.9 | 665.2 | 667.7 | 664.6 |
| 10° | 670.1 | 665.8 | 653.5 | 651.6 | 647.9 |
| 12.5° | 660.9 | 655.3 | 638.6 | 634.9 | 628.1 |
| 15° | 649.7 | 642.9 | 621.9 | 610.2 | 604.0 |
| 17.5° | 636.8 | 626.9 | 600.9 | 587.3 | 577.4 |
| 20° | 621.9 | 609.6 | 578.7 | 563.2 | 549.6 |
| 22.5° | 605.9 | 591.6 | 555.8 | 534.8 | 525.5 |
| 25° | 589.8 | 570.0 | 529.2 | 503.8 | 494.6 |
| 27.5° | 570.6 | 549.6 | 504.5 | 475.4 | 461.2 |
| 30° | 550.2 | 526.7 | 477.3 | 445.7 | 429.0 |
| 32.5° | 530.4 | 502.0 | 451.3 | 414.2 | 398.8 |
| 35° | 508.2 | 476.6 | 422.2 | 383.3 | 369.7 |
| 37.5° | 486.5 | 452.5 | 395.0 | 352.4 | 336.9 |
| 40° | 463.7 | 426.6 | 366.6 | 322.7 | 306.6 |
| 42.5° | 440.2 | 400.6 | 338.2 | 292.4 | 277.0 |
| 45° | 415.4 | 374.0 | 309.1 | 265.2 | 250.4 |
| 47.5° | 392.0 | 348.1 | 281.3 | 237.4 | 223.8 |
| 50° | 366.0 | 322.1 | 254.1 | 211.4 | 198.4 |
| 52.5° | 340.6 | 294.3 | 228.1 | 187.3 | 175.6 |
| 55° | 315.9 | 267.7 | 200.9 | 163.8 | 152.1 |
| 57.5° | 290.6 | 241.1 | 176.8 | 142.2 | 132.3 |
| 60° | 264.6 | 215.1 | 151.5 | 119.9 | 110.0 |
| 62.5° | 239.3 | 189.8 | 129.8 | 100.2 | 95.2 |
| 65° | 213.3 | 163.2 | 107.6 | 86.6 | 84.7 |
| 67.5° | 188.6 | 138.5 | 86.6 | 76.0 | 74.2 |
| 70° | 162.6 | 114.4 | 71.7 | 65.5 | 63.1 |
| 72.5° | 137.9 | 92.1 | 60.0 | 55.0 | 53.8 |
| 75° | 113.8 | 70.5 | 49.5 | 45.1 | 44.5 |
| 77.5° | 89.6 | 50.1 | 38.9 | 36.5 | 35.2 |
| 80° | 67.4 | 35.9 | 29.7 | 27.2 | 27.2 |
| 82.5° | 47.0 | 24.1 | 20.4 | 19.2 | 19.2 |
| 85° | 26.6 | 13.6 | 11.7 | 11.7 | 11.7 |
| 87.5° | 9.9 | 4.9 | 4.9 | 4.3 | 4.3 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)