

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: P333912

Luminaire Tested: **S122RDS-S675D940-4F0-1E-UDD-F**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333912
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-S675D940-4F0-1E-UDD-F
Description: DEFINE 2 REGRESSED DIRECT LED LUMINAIRE, FLUSH SATIN WHITE DIFFUSER
PENDANT/SURFACE/WALL MOUNT, 675 LUMENS PER FOOT
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2026.5 lumens
Efficiency: N/A
Efficacy: 77.1 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

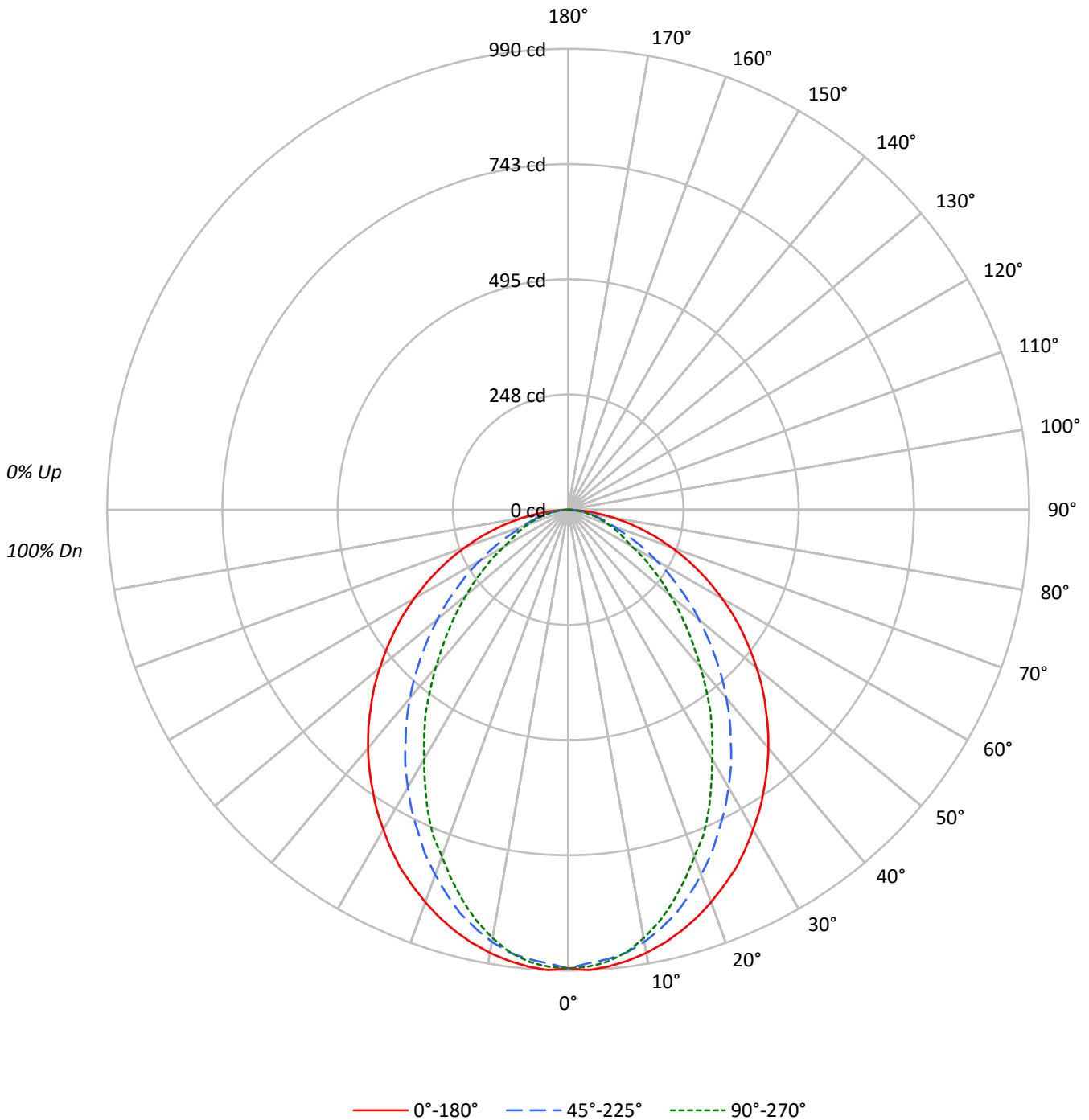
Input Watts (W): 26.3
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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 | | | | | 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 | 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° | 15908 | 15908 | 15908 |
| 5° | 15969 | 15710 | 15796 |
| 10° | 15847 | 15452 | 15321 |
| 15° | 15666 | 14995 | 14562 |
| 20° | 15414 | 14340 | 13620 |
| 25° | 15155 | 13598 | 12709 |
| 30° | 14796 | 12834 | 11537 |
| 35° | 14448 | 12004 | 10510 |
| 40° | 14096 | 11145 | 9322 |
| 45° | 13682 | 10182 | 8245 |
| 50° | 13260 | 9206 | 7189 |
| 55° | 12828 | 8158 | 6176 |
| 60° | 12326 | 7056 | 5125 |
| 65° | 11752 | 5929 | 4669 |
| 70° | 11070 | 4881 | 4296 |
| 75° | 10237 | 4448 | 4005 |
| 80° | 9038 | 3980 | 3645 |
| 85° | 7095 | 3131 | 3131 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 92.3 | 4.6 |
| 10°-20° | 253.5 | 12.5 |
| 20°-30° | 355.9 | 17.6 |
| 30°-40° | 388.0 | 19.1 |
| 40°-50° | 356.6 | 17.6 |
| 50°-60° | 280.0 | 13.8 |
| 60°-70° | 182.3 | 9.0 |
| 70°-80° | 93.8 | 4.6 |
| 80°-90° | 23.9 | 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° | 701.8 | 34.6 |
| 0°-40° | 1089.7 | 53.8 |
| 0°-60° | 1726.4 | 85.2 |
| 0°-90° | 2026.5 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 2026.5 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|-----|-------|-----|-------|-----|------|
| 0° | 985 | 985 | 985 | 985 | 985 | |
| 5° | 985 | 981 | 969 | 977 | 975 | 93 |
| 15° | 937 | 927 | 897 | 880 | 871 | 264 |
| 25° | 851 | 822 | 763 | 727 | 713 | 391 |
| 35° | 733 | 688 | 609 | 553 | 533 | 459 |
| 45° | 599 | 540 | 446 | 382 | 361 | 463 |
| 55° | 456 | 386 | 290 | 236 | 219 | 407 |
| 65° | 308 | 235 | 155 | 125 | 122 | 305 |
| 75° | 164 | 102 | 71 | 65 | 64 | 174 |
| 85° | 38 | 20 | 17 | 17 | 17 | 46 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



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CATALOG NUMBER: S122RDS-S675D940-4F0-1E-UDD-F

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|-------|-------|-------|-------|-------|
| 0° | 985.3 | 985.3 | 985.3 | 985.3 | 985.3 |
| 2.5° | 989.8 | 985.3 | 975.5 | 984.4 | 982.7 |
| 5° | 985.3 | 980.9 | 969.3 | 977.3 | 974.6 |
| 7.5° | 977.3 | 972.0 | 959.5 | 963.0 | 958.6 |
| 10° | 966.6 | 960.4 | 942.5 | 939.9 | 934.5 |
| 12.5° | 953.2 | 945.2 | 921.1 | 915.8 | 906.0 |
| 15° | 937.2 | 927.4 | 897.1 | 880.1 | 871.2 |
| 17.5° | 918.5 | 904.2 | 866.7 | 847.1 | 832.9 |
| 20° | 897.1 | 879.2 | 834.6 | 812.3 | 792.7 |
| 22.5° | 873.9 | 853.4 | 801.6 | 771.3 | 758.0 |
| 25° | 850.7 | 822.2 | 763.3 | 726.7 | 713.4 |
| 27.5° | 823.0 | 792.7 | 727.6 | 685.7 | 665.2 |
| 30° | 793.6 | 759.7 | 688.4 | 642.9 | 618.8 |
| 32.5° | 765.1 | 724.1 | 650.9 | 597.4 | 575.2 |
| 35° | 733.0 | 687.5 | 609.0 | 552.9 | 533.2 |
| 37.5° | 701.8 | 652.7 | 569.8 | 508.3 | 486.0 |
| 40° | 668.8 | 615.3 | 528.8 | 465.5 | 442.3 |
| 42.5° | 634.9 | 577.8 | 487.8 | 421.8 | 399.5 |
| 45° | 599.2 | 539.5 | 445.9 | 382.5 | 361.1 |
| 47.5° | 565.3 | 502.0 | 405.7 | 342.4 | 322.8 |
| 50° | 527.9 | 464.6 | 366.5 | 305.0 | 286.2 |
| 52.5° | 491.3 | 424.5 | 329.0 | 270.2 | 253.2 |
| 55° | 455.7 | 386.1 | 289.8 | 236.3 | 219.4 |
| 57.5° | 419.1 | 347.8 | 255.0 | 205.1 | 190.8 |
| 60° | 381.7 | 310.3 | 218.5 | 173.0 | 158.7 |
| 62.5° | 345.1 | 273.8 | 187.3 | 144.5 | 137.3 |
| 65° | 307.6 | 235.4 | 155.2 | 124.8 | 122.2 |
| 67.5° | 272.0 | 199.7 | 124.8 | 109.7 | 107.0 |
| 70° | 234.5 | 165.0 | 103.4 | 94.5 | 91.0 |
| 72.5° | 198.9 | 132.9 | 86.5 | 79.4 | 77.6 |
| 75° | 164.1 | 101.7 | 71.3 | 65.1 | 64.2 |
| 77.5° | 129.3 | 72.2 | 56.2 | 52.6 | 50.8 |
| 80° | 97.2 | 51.7 | 42.8 | 39.2 | 39.2 |
| 82.5° | 67.8 | 34.8 | 29.4 | 27.6 | 27.6 |
| 85° | 38.3 | 19.6 | 16.9 | 16.9 | 16.9 |
| 87.5° | 14.3 | 7.1 | 7.1 | 6.2 | 6.2 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)