

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: P334177

Luminaire Tested: **S124DS-S795D927-4F0-1E-UDD-F**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P334177
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-5)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S124DS-S795D927-4F0-1E-UDD-F
Description: DEFINE 4 DIRECT LED LUMINAIRE, FLUSH SATIN WHITE DIFFUSER
PENDANT/SURFACE/WALL MOUNT, 795 LUMENS PER FOOT
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2537.6 lumens
Efficiency: N/A
Efficacy: 96.5 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.29
Luminous Opening: Rectangular (W 0.33' x L: 4' x H: 0')
CIE Type: Direct

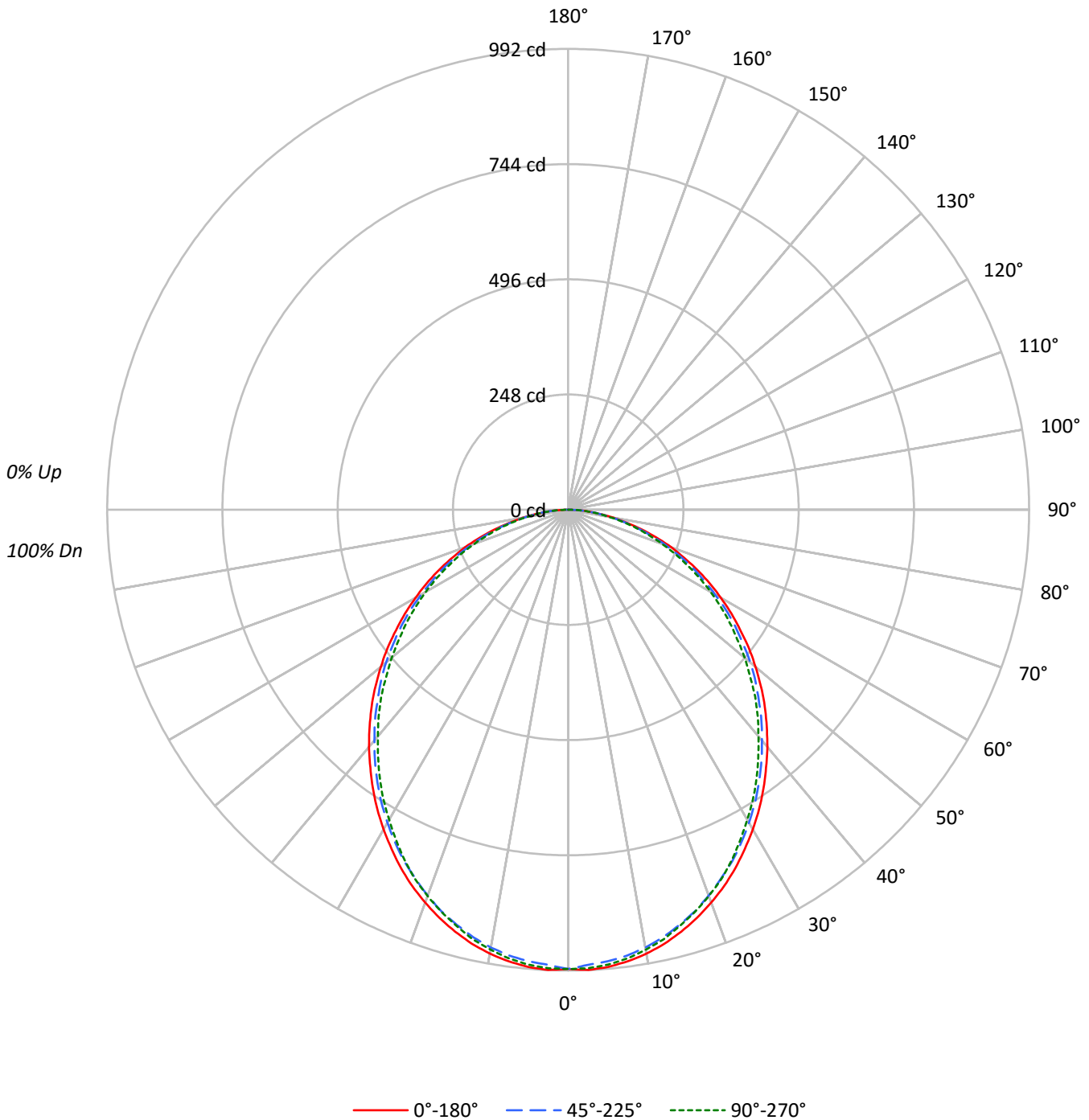
Input Watts (W): 26.3
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P334177

CATALOG NUMBER: S124DS-S795D927-4F0-1E-UDD-F

Luminous Intensity Polar Plot





TEST NUMBER: P334177

CATALOG NUMBER: S124DS-S795D927-4F0-1E-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 | 109 | 104 | 100 | 96 | 106 | 102 | 98 | 95 | 98 | 95 | 92 | 94 | 91 | 89 | 90 | 88 | 86 | 84 |
| 2 | 99 | 91 | 84 | 79 | 97 | 89 | 83 | 78 | 86 | 80 | 76 | 82 | 78 | 74 | 79 | 76 | 73 | 70 |
| 3 | 91 | 80 | 72 | 66 | 88 | 79 | 71 | 65 | 76 | 69 | 64 | 73 | 67 | 63 | 70 | 66 | 62 | 60 |
| 4 | 83 | 71 | 63 | 56 | 81 | 70 | 62 | 56 | 67 | 60 | 55 | 65 | 59 | 54 | 63 | 58 | 53 | 51 |
| 5 | 77 | 64 | 55 | 48 | 74 | 63 | 54 | 48 | 61 | 53 | 48 | 59 | 52 | 47 | 57 | 51 | 47 | 44 |
| 6 | 71 | 58 | 49 | 42 | 69 | 57 | 48 | 42 | 55 | 47 | 42 | 53 | 47 | 41 | 52 | 46 | 41 | 39 |
| 7 | 66 | 52 | 44 | 38 | 64 | 52 | 43 | 37 | 50 | 43 | 37 | 49 | 42 | 37 | 47 | 41 | 37 | 35 |
| 8 | 61 | 48 | 39 | 34 | 60 | 47 | 39 | 34 | 46 | 39 | 33 | 45 | 38 | 33 | 43 | 37 | 33 | 31 |
| 9 | 57 | 44 | 36 | 30 | 56 | 43 | 36 | 30 | 42 | 35 | 30 | 41 | 35 | 30 | 40 | 34 | 30 | 28 |
| 10 | 54 | 41 | 33 | 28 | 52 | 40 | 33 | 28 | 39 | 32 | 27 | 38 | 32 | 27 | 37 | 31 | 27 | 25 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|------|------|------|
| 0° | 7981 | 7981 | 7981 |
| 5° | 8006 | 7909 | 7967 |
| 10° | 7955 | 7845 | 7884 |
| 15° | 7859 | 7733 | 7753 |
| 20° | 7731 | 7595 | 7602 |
| 25° | 7586 | 7438 | 7416 |
| 30° | 7407 | 7251 | 7185 |
| 35° | 7222 | 7057 | 6964 |
| 40° | 7029 | 6837 | 6712 |
| 45° | 6828 | 6621 | 6494 |
| 50° | 6606 | 6428 | 6228 |
| 55° | 6366 | 6177 | 5976 |
| 60° | 6127 | 5896 | 5717 |
| 65° | 5857 | 5629 | 5402 |
| 70° | 5554 | 5273 | 5068 |
| 75° | 5090 | 4844 | 4719 |
| 80° | 4528 | 4347 | 4235 |
| 85° | 3964 | 3816 | 3742 |



TEST NUMBER: P334177

CATALOG NUMBER: S124DS-S795D927-4F0-1E-UDD-F

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 93.2 | 3.7 |
| 10°-20° | 262.5 | 10.3 |
| 20°-30° | 386.4 | 15.2 |
| 30°-40° | 449.1 | 17.7 |
| 40°-50° | 449.1 | 17.7 |
| 50°-60° | 392.8 | 15.5 |
| 60°-70° | 291.6 | 11.5 |
| 70°-80° | 165.5 | 6.5 |
| 80°-90° | 47.4 | 1.9 |
| 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° | 742.1 | 29.2 |
| 0°-40° | 1191.2 | 46.9 |
| 0°-60° | 2033.1 | 80.1 |
| 0°-90° | 2537.6 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 2537.6 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|-----|-------|-----|-------|-----|------|
| 0° | 989 | 989 | 989 | 989 | 989 | |
| 5° | 988 | 985 | 976 | 985 | 983 | 94 |
| 15° | 940 | 937 | 925 | 930 | 928 | 265 |
| 25° | 852 | 846 | 835 | 836 | 833 | 392 |
| 35° | 733 | 727 | 716 | 711 | 707 | 458 |
| 45° | 598 | 593 | 580 | 571 | 569 | 461 |
| 55° | 452 | 450 | 439 | 429 | 425 | 405 |
| 65° | 307 | 303 | 295 | 287 | 283 | 303 |
| 75° | 163 | 159 | 155 | 152 | 151 | 173 |
| 85° | 43 | 43 | 41 | 41 | 40 | 49 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P334177

CATALOG NUMBER: S124DS-S795D927-4F0-1E-UDD-F

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|-------|-------|-------|-------|-------|
| 0° | 988.6 | 988.6 | 988.6 | 988.6 | 988.6 |
| 2.5° | 991.8 | 989.4 | 980.7 | 988.6 | 987.9 |
| 5° | 987.9 | 984.7 | 976.0 | 984.7 | 983.1 |
| 7.5° | 980.7 | 977.6 | 968.0 | 975.2 | 974.4 |
| 10° | 970.4 | 967.3 | 957.0 | 963.3 | 961.7 |
| 12.5° | 957.0 | 953.8 | 942.7 | 949.8 | 947.5 |
| 15° | 940.3 | 937.2 | 925.3 | 930.0 | 927.6 |
| 17.5° | 921.3 | 917.3 | 906.3 | 909.4 | 907.8 |
| 20° | 899.9 | 896.0 | 884.1 | 886.5 | 884.9 |
| 22.5° | 876.9 | 871.4 | 859.5 | 864.3 | 861.1 |
| 25° | 851.6 | 846.1 | 835.0 | 835.8 | 832.6 |
| 27.5° | 823.1 | 817.5 | 807.2 | 805.7 | 801.7 |
| 30° | 794.6 | 788.2 | 777.9 | 774.8 | 770.8 |
| 32.5° | 764.5 | 758.9 | 747.8 | 743.9 | 739.9 |
| 35° | 732.8 | 727.2 | 716.1 | 710.6 | 706.6 |
| 37.5° | 699.5 | 694.7 | 682.9 | 677.3 | 671.8 |
| 40° | 667.0 | 660.7 | 648.8 | 640.9 | 636.9 |
| 42.5° | 632.2 | 629.0 | 615.5 | 606.0 | 603.6 |
| 45° | 598.1 | 592.6 | 579.9 | 571.2 | 568.8 |
| 47.5° | 562.5 | 558.5 | 546.6 | 537.1 | 530.8 |
| 50° | 526.0 | 522.8 | 511.8 | 500.7 | 495.9 |
| 52.5° | 490.4 | 486.4 | 474.5 | 465.0 | 458.7 |
| 55° | 452.3 | 450.0 | 438.9 | 429.4 | 424.6 |
| 57.5° | 416.7 | 414.3 | 403.2 | 393.7 | 389.0 |
| 60° | 379.5 | 375.5 | 365.2 | 358.1 | 354.1 |
| 62.5° | 343.0 | 339.8 | 328.8 | 322.4 | 318.5 |
| 65° | 306.6 | 302.6 | 294.7 | 286.8 | 282.8 |
| 67.5° | 269.3 | 266.2 | 258.3 | 250.3 | 249.5 |
| 70° | 235.3 | 229.7 | 223.4 | 217.1 | 214.7 |
| 72.5° | 198.8 | 193.3 | 188.5 | 183.8 | 181.4 |
| 75° | 163.2 | 159.2 | 155.3 | 152.1 | 151.3 |
| 77.5° | 128.3 | 126.7 | 122.8 | 122.0 | 119.6 |
| 80° | 97.4 | 95.1 | 93.5 | 91.9 | 91.1 |
| 82.5° | 67.3 | 66.5 | 66.5 | 65.8 | 65.0 |
| 85° | 42.8 | 42.8 | 41.2 | 41.2 | 40.4 |
| 87.5° | 20.6 | 19.8 | 19.0 | 19.0 | 19.0 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)