

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: P334192

Luminaire Tested: **S124DW-S795D940-4F0-1E-UDD-F**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P334192
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: S124DW-S795D940-4F0-1E-UDD-F
Description: DEFINE 4 DIRECT LED LUMINAIRE, FLUSH SATIN WHITE DIFFUSER
PENDANT/SURFACE/WALL MOUNT, 795 LUMENS PER FOOT
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

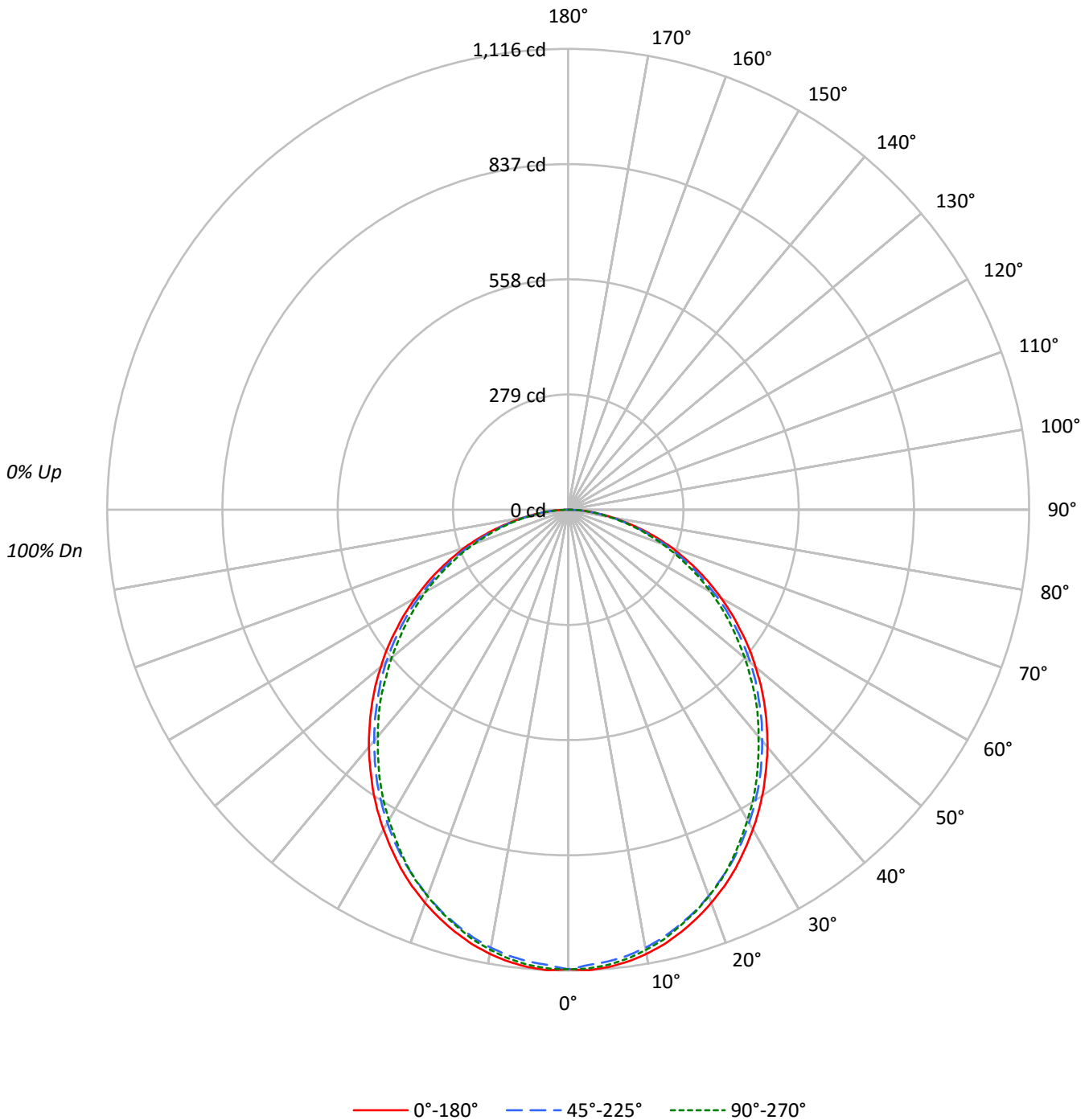
Lumens per Lamp: N/A
Luminaire Lumens: 2856.4 lumens
Efficiency: N/A
Efficacy: 108.6 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.29
Luminous Opening: Rectangular (W 0.33' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 26.3
Input Voltage (V): 120
Input Current (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 | 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° | 8984 | 8984 | 8984 |
| 5° | 9011 | 8903 | 8968 |
| 10° | 8954 | 8830 | 8874 |
| 15° | 8847 | 8705 | 8727 |
| 20° | 8703 | 8550 | 8557 |
| 25° | 8539 | 8372 | 8348 |
| 30° | 8337 | 8163 | 8088 |
| 35° | 8129 | 7944 | 7839 |
| 40° | 7912 | 7696 | 7555 |
| 45° | 7686 | 7452 | 7309 |
| 50° | 7436 | 7234 | 7011 |
| 55° | 7167 | 6953 | 6728 |
| 60° | 6896 | 6638 | 6436 |
| 65° | 6592 | 6336 | 6080 |
| 70° | 6250 | 5936 | 5705 |
| 75° | 5730 | 5452 | 5312 |
| 80° | 5100 | 4891 | 4765 |
| 85° | 4465 | 4298 | 4215 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 104.9 | 3.7 |
| 10°-20° | 295.5 | 10.3 |
| 20°-30° | 434.9 | 15.2 |
| 30°-40° | 505.6 | 17.7 |
| 40°-50° | 505.5 | 17.7 |
| 50°-60° | 442.1 | 15.5 |
| 60°-70° | 328.2 | 11.5 |
| 70°-80° | 186.2 | 6.5 |
| 80°-90° | 53.3 | 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° | 835.3 | 29.2 |
| 0°-40° | 1340.9 | 46.9 |
| 0°-60° | 2288.5 | 80.1 |
| 0°-90° | 2856.4 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 2856.4 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|------|-------|------|-------|------|------|
| 0° | 1113 | 1113 | 1113 | 1113 | 1113 | |
| 5° | 1112 | 1108 | 1099 | 1108 | 1107 | 106 |
| 15° | 1058 | 1055 | 1042 | 1047 | 1044 | 298 |
| 25° | 959 | 952 | 940 | 941 | 937 | 441 |
| 35° | 825 | 819 | 806 | 800 | 795 | 516 |
| 45° | 673 | 667 | 653 | 643 | 640 | 519 |
| 55° | 509 | 506 | 494 | 483 | 478 | 456 |
| 65° | 345 | 341 | 332 | 323 | 318 | 342 |
| 75° | 184 | 179 | 175 | 171 | 170 | 195 |
| 85° | 48 | 48 | 46 | 46 | 46 | 55 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P334192

CATALOG NUMBER: S124DW-S795D940-4F0-1E-UDD-F

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|--------|--------|--------|--------|--------|
| 0° | 1112.9 | 1112.9 | 1112.9 | 1112.9 | 1112.9 |
| 2.5° | 1116.4 | 1113.7 | 1103.9 | 1112.9 | 1112.0 |
| 5° | 1112.0 | 1108.4 | 1098.6 | 1108.4 | 1106.6 |
| 7.5° | 1103.9 | 1100.4 | 1089.7 | 1097.7 | 1096.8 |
| 10° | 1092.3 | 1088.8 | 1077.2 | 1084.3 | 1082.5 |
| 12.5° | 1077.2 | 1073.6 | 1061.1 | 1069.2 | 1066.5 |
| 15° | 1058.5 | 1054.9 | 1041.5 | 1046.9 | 1044.2 |
| 17.5° | 1037.1 | 1032.6 | 1020.1 | 1023.7 | 1021.9 |
| 20° | 1013.0 | 1008.5 | 995.2 | 997.8 | 996.0 |
| 22.5° | 987.1 | 980.9 | 967.5 | 972.9 | 969.3 |
| 25° | 958.6 | 952.3 | 939.9 | 940.8 | 937.2 |
| 27.5° | 926.5 | 920.2 | 908.7 | 906.9 | 902.4 |
| 30° | 894.4 | 887.3 | 875.7 | 872.1 | 867.6 |
| 32.5° | 860.5 | 854.3 | 841.8 | 837.3 | 832.9 |
| 35° | 824.8 | 818.6 | 806.1 | 799.9 | 795.4 |
| 37.5° | 787.4 | 782.0 | 768.7 | 762.4 | 756.2 |
| 40° | 750.8 | 743.7 | 730.3 | 721.4 | 716.9 |
| 42.5° | 711.6 | 708.0 | 692.9 | 682.2 | 679.5 |
| 45° | 673.2 | 667.0 | 652.7 | 642.9 | 640.2 |
| 47.5° | 633.1 | 628.7 | 615.3 | 604.6 | 597.4 |
| 50° | 592.1 | 588.5 | 576.0 | 563.6 | 558.2 |
| 52.5° | 552.0 | 547.5 | 534.1 | 523.4 | 516.3 |
| 55° | 509.2 | 506.5 | 494.0 | 483.3 | 478.0 |
| 57.5° | 469.0 | 466.4 | 453.9 | 443.2 | 437.8 |
| 60° | 427.1 | 422.7 | 411.1 | 403.1 | 398.6 |
| 62.5° | 386.1 | 382.5 | 370.1 | 362.9 | 358.5 |
| 65° | 345.1 | 340.6 | 331.7 | 322.8 | 318.3 |
| 67.5° | 303.2 | 299.6 | 290.7 | 281.8 | 280.9 |
| 70° | 264.8 | 258.6 | 251.5 | 244.3 | 241.7 |
| 72.5° | 223.8 | 217.6 | 212.2 | 206.9 | 204.2 |
| 75° | 183.7 | 179.2 | 174.8 | 171.2 | 170.3 |
| 77.5° | 144.5 | 142.7 | 138.2 | 137.3 | 134.6 |
| 80° | 109.7 | 107.0 | 105.2 | 103.4 | 102.5 |
| 82.5° | 75.8 | 74.9 | 74.9 | 74.0 | 73.1 |
| 85° | 48.2 | 48.2 | 46.4 | 46.4 | 45.5 |
| 87.5° | 23.2 | 22.3 | 21.4 | 21.4 | 21.4 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)