

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: P334316

Luminaire Tested: **S125DW-S610D927-4F0-1E-UDD-D**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P334316
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-17)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S125DW-S610D927-4F0-1E-UDD-D
Description: DEFINE 5 DIRECT LED LUMINAIRE, DROP SATIN WHITE DIFFUSER
PENDANT/SURFACE/WALL MOUNT, 610 LUMENS PER FOOT
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1797.3 lumens
Efficiency: N/A
Efficacy: 95.6 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.21 / 1.34
Luminous Opening: Rectangular (W 0.42' x L: 4' x H: 0')
CIE Type: Direct

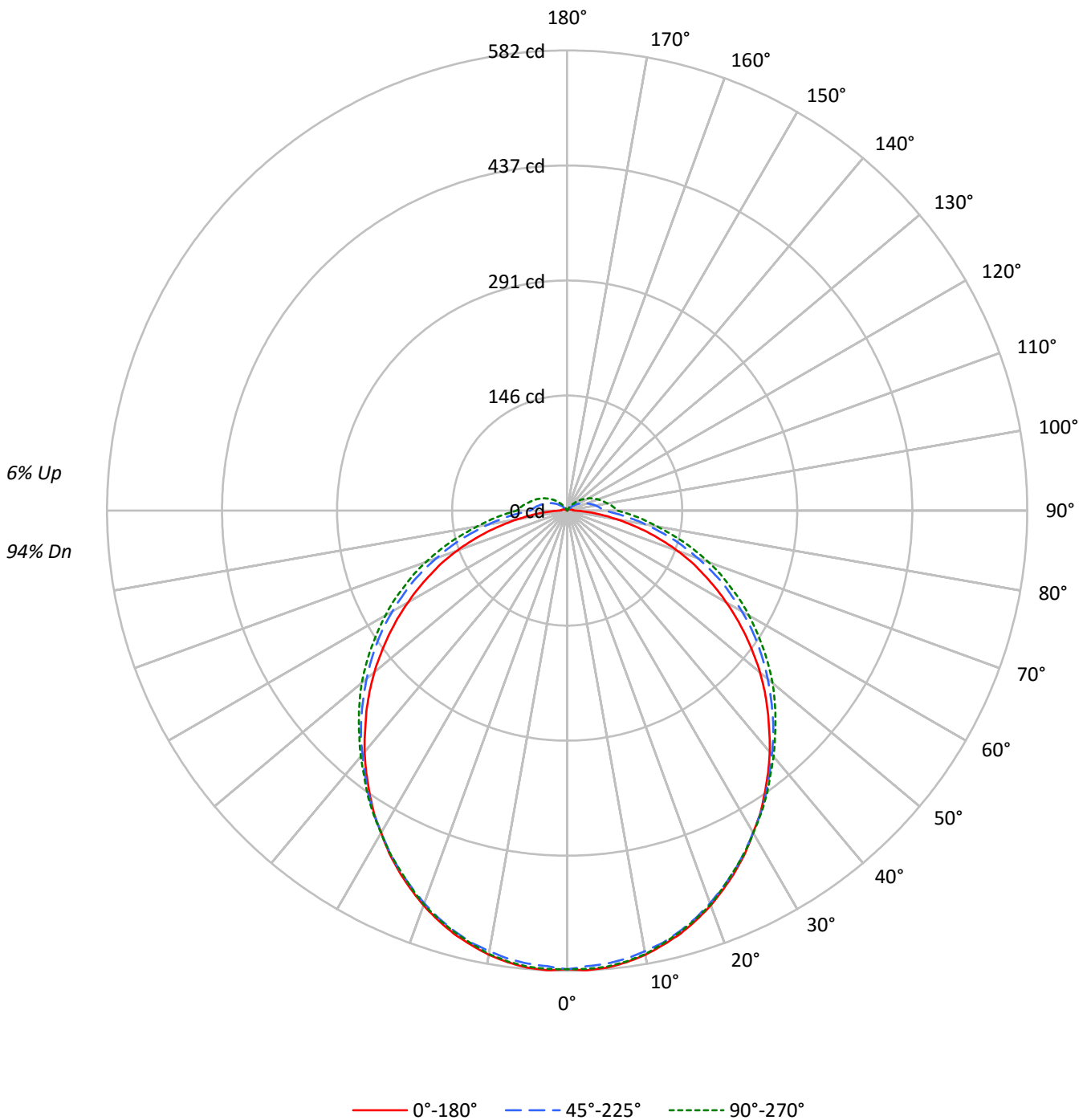
Input Watts (W): 18.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P334316

CATALOG NUMBER: S125DW-S610D927-4F0-1E-UDD-D

Luminous Intensity Polar Plot





TEST NUMBER: P334316

CATALOG NUMBER: S125DW-S610D927-4F0-1E-UDD-D

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 | 118 | 118 | 118 | 118 | 114 | 114 | 114 | 114 | 108 | 108 | 108 | 102 | 102 | 102 | 96 | 96 | 96 | 94 |
| 1 | 106 | 101 | 96 | 92 | 103 | 98 | 94 | 90 | 93 | 89 | 86 | 88 | 85 | 82 | 83 | 81 | 79 | 76 |
| 2 | 96 | 88 | 80 | 74 | 93 | 85 | 78 | 73 | 81 | 75 | 70 | 76 | 72 | 68 | 72 | 69 | 65 | 63 |
| 3 | 88 | 77 | 68 | 61 | 84 | 75 | 67 | 60 | 71 | 64 | 59 | 67 | 61 | 57 | 64 | 59 | 55 | 53 |
| 4 | 80 | 68 | 59 | 52 | 77 | 66 | 58 | 51 | 63 | 55 | 50 | 60 | 53 | 48 | 57 | 51 | 47 | 45 |
| 5 | 74 | 60 | 51 | 44 | 71 | 59 | 50 | 44 | 56 | 49 | 43 | 53 | 47 | 42 | 51 | 45 | 41 | 39 |
| 6 | 68 | 54 | 45 | 39 | 66 | 53 | 45 | 38 | 51 | 43 | 38 | 48 | 42 | 37 | 46 | 40 | 36 | 34 |
| 7 | 63 | 49 | 40 | 34 | 61 | 48 | 40 | 34 | 46 | 39 | 33 | 44 | 37 | 33 | 42 | 36 | 32 | 30 |
| 8 | 59 | 45 | 36 | 30 | 57 | 44 | 36 | 30 | 42 | 35 | 30 | 40 | 34 | 29 | 39 | 33 | 29 | 27 |
| 9 | 55 | 41 | 33 | 27 | 53 | 40 | 33 | 27 | 39 | 32 | 27 | 37 | 31 | 26 | 36 | 30 | 26 | 24 |
| 10 | 51 | 38 | 30 | 25 | 50 | 37 | 30 | 25 | 36 | 29 | 24 | 35 | 28 | 24 | 33 | 28 | 23 | 22 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|------|------|------|
| 0° | 3747 | 3747 | 3747 |
| 5° | 3761 | 3728 | 3754 |
| 10° | 3741 | 3712 | 3734 |
| 15° | 3704 | 3681 | 3689 |
| 20° | 3652 | 3632 | 3643 |
| 25° | 3587 | 3575 | 3571 |
| 30° | 3508 | 3508 | 3512 |
| 35° | 3435 | 3453 | 3467 |
| 40° | 3361 | 3395 | 3424 |
| 45° | 3278 | 3361 | 3403 |
| 50° | 3200 | 3326 | 3406 |
| 55° | 3107 | 3312 | 3407 |
| 60° | 3004 | 3299 | 3431 |
| 65° | 2904 | 3312 | 3477 |
| 70° | 2793 | 3320 | 3588 |
| 75° | 2613 | 3436 | 3790 |
| 80° | 2391 | 3745 | 4296 |
| 85° | 2319 | 5187 | 6447 |



TEST NUMBER: P334316

CATALOG NUMBER: S125DW-S610D927-4F0-1E-UDD-D

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 54.9 | 3.1 |
| 10°-20° | 155.9 | 8.7 |
| 20°-30° | 231.8 | 12.9 |
| 30°-40° | 274.5 | 15.3 |
| 40°-50° | 283.8 | 15.8 |
| 50°-60° | 261.4 | 14.5 |
| 60°-70° | 211.3 | 11.8 |
| 70°-80° | 141.4 | 7.9 |
| 80°-90° | 73.1 | 4.1 |
| 90°-100° | 41.2 | 2.3 |
| 100°-110° | 30.3 | 1.7 |
| 110°-120° | 20.3 | 1.1 |
| 120°-130° | 11.5 | 0.6 |
| 130°-140° | 5.0 | 0.3 |
| 140°-150° | 1.0 | 0.1 |
| 150°-160° | 0.0 | 0.0 |
| 160°-170° | 0.0 | 0.0 |
| 170°-180° | 0.0 | 0.0 |
| 0°-30° | 442.5 | 24.6 |
| 0°-40° | 717.0 | 39.9 |
| 0°-60° | 1262.1 | 70.2 |
| 0°-90° | 1687.9 | 93.9 |
| 90°-120° | 91.8 | 5.1 |
| 90°-150° | 109.4 | 6.1 |
| 90°-180° | 109.0 | 6.1 |
| 0°-180° | 1797.3 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|-----|-------|-----|-------|-----|------|
| 0° | 580 | 580 | 580 | 580 | 580 | |
| 5° | 580 | 579 | 575 | 580 | 579 | 55 |
| 15° | 554 | 555 | 551 | 554 | 552 | 156 |
| 25° | 503 | 505 | 502 | 504 | 501 | 232 |
| 35° | 436 | 440 | 438 | 440 | 440 | 273 |
| 45° | 359 | 365 | 368 | 372 | 373 | 277 |
| 55° | 276 | 285 | 294 | 300 | 303 | 247 |
| 65° | 190 | 203 | 217 | 225 | 228 | 189 |
| 75° | 105 | 119 | 138 | 149 | 152 | 111 |
| 85° | 31 | 50 | 70 | 82 | 87 | 33 |
| 90° | 9 | 27 | 47 | 60 | 64 | 6 |
| 95° | 7 | 22 | 42 | 54 | 58 | 6 |
| 105° | 5 | 14 | 31 | 43 | 47 | 5 |
| 115° | 3 | 7 | 22 | 32 | 36 | 3 |
| 125° | 2 | 2 | 13 | 22 | 25 | 2 |
| 135° | 1 | 1 | 5 | 12 | 15 | 1 |
| 145° | 1 | 0 | 0 | 3 | 5 | 0 |
| 155° | 0 | 0 | 0 | 0 | 0 | 0 |
| 165° | 0 | 0 | 0 | 0 | 0 | 0 |
| 175° | 0 | 0 | 0 | 0 | 0 | 0 |
| 180° | 0 | 0 | 0 | 0 | 0 | 0 |



TEST NUMBER: P334316

CATALOG NUMBER: S125DW-S610D927-4F0-1E-UDD-D

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|-------|-------|-------|-------|-------|
| 0° | 580.2 | 580.2 | 580.2 | 580.2 | 580.2 |
| 2.5° | 581.9 | 580.8 | 576.8 | 580.8 | 580.2 |
| 5° | 580.2 | 579.0 | 575.1 | 579.6 | 579.0 |
| 7.5° | 576.2 | 575.6 | 571.7 | 575.6 | 575.1 |
| 10° | 570.5 | 570.5 | 566.0 | 569.9 | 569.4 |
| 12.5° | 562.6 | 563.1 | 559.7 | 562.6 | 560.8 |
| 15° | 554.0 | 554.6 | 550.6 | 554.0 | 551.7 |
| 17.5° | 543.2 | 544.3 | 540.4 | 543.2 | 541.5 |
| 20° | 531.3 | 532.4 | 528.4 | 530.1 | 530.1 |
| 22.5° | 517.6 | 519.9 | 515.3 | 517.6 | 515.9 |
| 25° | 503.4 | 505.1 | 501.7 | 504.0 | 501.1 |
| 27.5° | 488.0 | 490.3 | 486.3 | 488.0 | 486.9 |
| 30° | 470.4 | 473.8 | 470.4 | 471.5 | 471.0 |
| 32.5° | 454.5 | 457.3 | 455.0 | 456.2 | 455.6 |
| 35° | 435.7 | 439.7 | 438.0 | 439.7 | 439.7 |
| 37.5° | 417.5 | 420.9 | 420.3 | 422.6 | 422.1 |
| 40° | 398.7 | 403.3 | 402.7 | 405.0 | 406.1 |
| 42.5° | 378.3 | 384.5 | 386.2 | 389.1 | 389.1 |
| 45° | 358.9 | 365.2 | 368.0 | 372.0 | 372.6 |
| 47.5° | 339.0 | 344.7 | 349.2 | 354.9 | 356.1 |
| 50° | 318.5 | 324.8 | 331.0 | 337.3 | 339.0 |
| 52.5° | 296.9 | 304.9 | 312.8 | 319.7 | 320.8 |
| 55° | 275.9 | 285.0 | 294.1 | 300.3 | 302.6 |
| 57.5° | 254.3 | 265.1 | 275.3 | 282.1 | 283.8 |
| 60° | 232.6 | 244.0 | 255.4 | 263.9 | 265.6 |
| 62.5° | 211.6 | 223.0 | 235.5 | 245.2 | 247.4 |
| 65° | 190.0 | 203.1 | 216.7 | 225.2 | 227.5 |
| 67.5° | 170.1 | 182.6 | 196.2 | 206.5 | 209.3 |
| 70° | 147.9 | 161.0 | 175.8 | 186.6 | 190.0 |
| 72.5° | 126.3 | 139.9 | 156.4 | 168.4 | 170.6 |
| 75° | 104.7 | 119.4 | 137.7 | 149.0 | 151.9 |
| 77.5° | 83.6 | 100.7 | 117.7 | 130.3 | 132.5 |
| 80° | 64.3 | 81.3 | 100.7 | 113.2 | 115.5 |
| 82.5° | 46.6 | 64.8 | 84.8 | 96.7 | 101.2 |
| 85° | 31.3 | 50.1 | 70.0 | 82.5 | 87.0 |
| 87.5° | 19.9 | 38.1 | 57.4 | 70.5 | 74.5 |
| 90° | 9.1 | 27.3 | 46.6 | 59.7 | 63.7 |
| 92.5° | 8.0 | 24.5 | 44.4 | 56.9 | 60.9 |
| 95° | 7.4 | 22.2 | 41.5 | 54.0 | 58.0 |
| 97.5° | 6.8 | 20.5 | 39.2 | 51.2 | 55.2 |
| 100° | 6.3 | 18.2 | 36.4 | 48.3 | 51.8 |
| 102.5° | 5.7 | 16.5 | 34.1 | 45.5 | 48.9 |
| 105° | 5.1 | 14.2 | 31.3 | 42.7 | 46.6 |
| 107.5° | 4.6 | 12.5 | 29.0 | 40.4 | 43.8 |
| 110° | 4.0 | 10.8 | 26.7 | 37.5 | 41.5 |



TEST NUMBER: P334316

CATALOG NUMBER: S125DW-S610D927-4F0-1E-UDD-D

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|-----|-------|------|-------|------|
| 112.5° | 4.0 | 9.1 | 24.5 | 34.7 | 38.7 |
| 115° | 3.4 | 7.4 | 22.2 | 32.4 | 35.8 |
| 117.5° | 2.8 | 5.7 | 19.9 | 29.6 | 33.6 |
| 120° | 2.8 | 4.6 | 17.6 | 27.3 | 30.7 |
| 122.5° | 2.3 | 2.8 | 15.4 | 24.5 | 27.9 |
| 125° | 2.3 | 1.7 | 13.1 | 22.2 | 25.0 |
| 127.5° | 1.7 | 1.1 | 10.8 | 19.3 | 22.8 |
| 130° | 1.7 | 1.1 | 9.1 | 17.1 | 19.9 |
| 132.5° | 1.1 | 1.1 | 6.8 | 14.8 | 17.1 |
| 135° | 1.1 | 0.6 | 4.6 | 11.9 | 14.8 |
| 137.5° | 1.1 | 0.6 | 2.8 | 9.7 | 11.9 |
| 140° | 0.6 | 0.6 | 1.1 | 7.4 | 9.7 |
| 142.5° | 0.6 | 0.0 | 0.0 | 5.1 | 7.4 |
| 145° | 0.6 | 0.0 | 0.0 | 2.8 | 5.1 |
| 147.5° | 0.0 | 0.0 | 0.0 | 1.1 | 2.3 |
| 150° | 0.0 | 0.0 | 0.0 | 0.0 | 0.6 |
| 152.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 155° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 157.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 160° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 162.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 165° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 167.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 170° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 172.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 175° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 177.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 180° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)