

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: P333896

Luminaire Tested: **S122RDP-S485D927-4F0-1E-UDD-F**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333896
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: S122RDP-S485D927-4F0-1E-UDD-F
Description: DEFINE 2 REGRESSED DIRECT LED LUMINAIRE, FLUSH SATIN WHITE DIFFUSER
PENDANT/SURFACE/WALL MOUNT, 485 LUMENS PER FOOT
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1292.6 lumens
Efficiency: N/A
Efficacy: 68.8 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

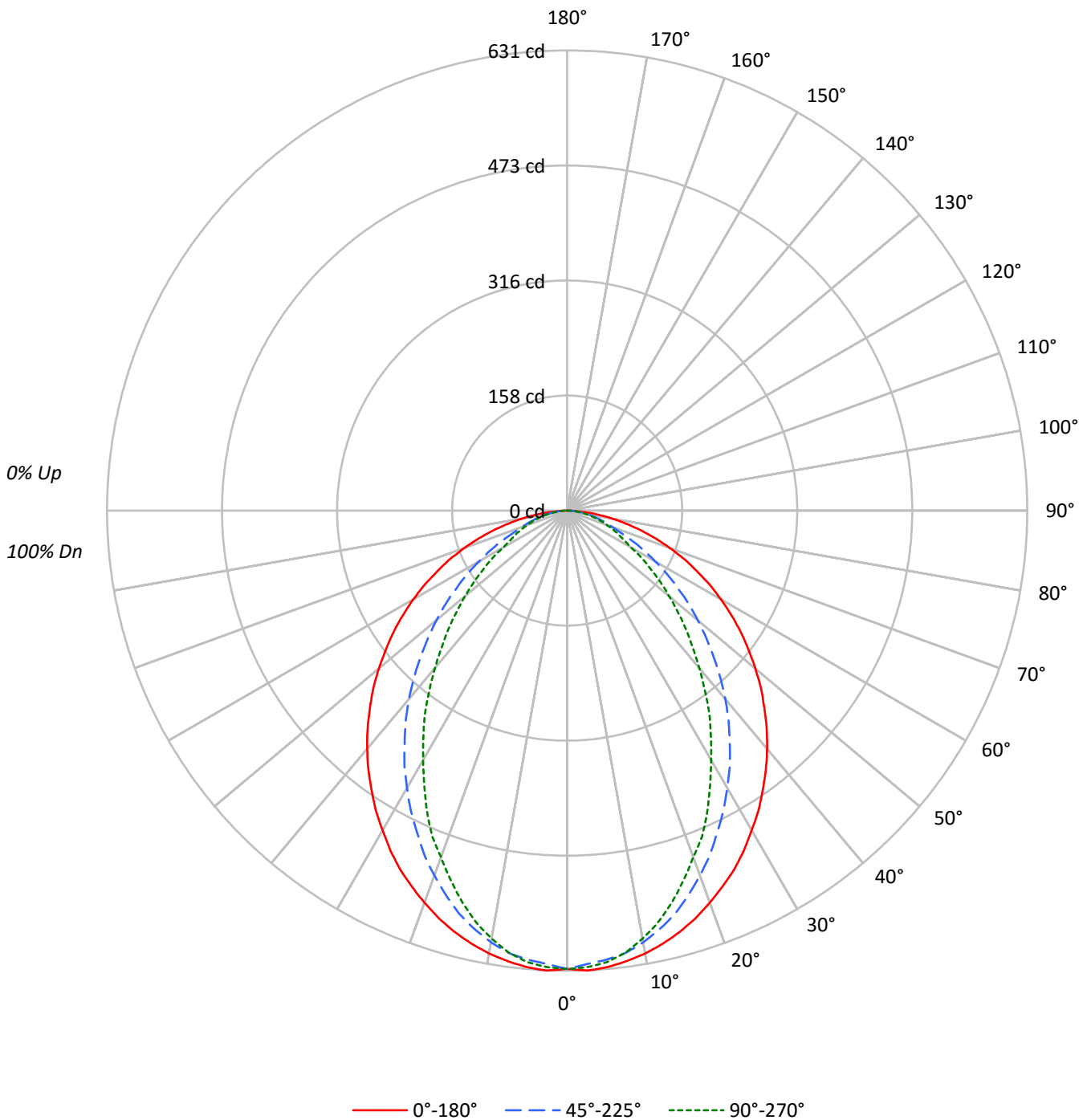
Input Watts (W): 18.8
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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 | 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° | 10148 | 10148 | 10148 |
| 5° | 10186 | 10021 | 10076 |
| 10° | 10109 | 9857 | 9773 |
| 15° | 9992 | 9565 | 9289 |
| 20° | 9832 | 9148 | 8689 |
| 25° | 9666 | 8674 | 8106 |
| 30° | 9437 | 8186 | 7360 |
| 35° | 9217 | 7658 | 6704 |
| 40° | 8991 | 7109 | 5946 |
| 45° | 8727 | 6494 | 5261 |
| 50° | 8457 | 5873 | 4587 |
| 55° | 8183 | 5205 | 3938 |
| 60° | 7860 | 4501 | 3268 |
| 65° | 7496 | 3782 | 2976 |
| 70° | 7062 | 3116 | 2738 |
| 75° | 6531 | 2838 | 2558 |
| 80° | 5765 | 2538 | 2325 |
| 85° | 4539 | 2001 | 2001 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 58.9 | 4.6 |
| 10°-20° | 161.7 | 12.5 |
| 20°-30° | 227.0 | 17.6 |
| 30°-40° | 247.5 | 19.1 |
| 40°-50° | 227.4 | 17.6 |
| 50°-60° | 178.6 | 13.8 |
| 60°-70° | 116.3 | 9.0 |
| 70°-80° | 59.9 | 4.6 |
| 80°-90° | 15.3 | 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° | 447.7 | 34.6 |
| 0°-40° | 695.1 | 53.8 |
| 0°-60° | 1101.2 | 85.2 |
| 0°-90° | 1292.6 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 1292.6 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|-----|-------|-----|-------|-----|------|
| 0° | 628 | 628 | 628 | 628 | 628 | |
| 5° | 628 | 626 | 618 | 623 | 622 | 60 |
| 15° | 598 | 592 | 572 | 561 | 556 | 168 |
| 25° | 543 | 524 | 487 | 464 | 455 | 250 |
| 35° | 468 | 438 | 388 | 353 | 340 | 293 |
| 45° | 382 | 344 | 284 | 244 | 230 | 295 |
| 55° | 291 | 246 | 185 | 151 | 140 | 260 |
| 65° | 196 | 150 | 99 | 80 | 78 | 195 |
| 75° | 105 | 65 | 46 | 42 | 41 | 111 |
| 85° | 24 | 12 | 11 | 11 | 11 | 29 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



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CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|-------|-------|-------|-------|-------|
| 0° | 628.5 | 628.5 | 628.5 | 628.5 | 628.5 |
| 2.5° | 631.4 | 628.5 | 622.3 | 628.0 | 626.8 |
| 5° | 628.5 | 625.7 | 618.3 | 623.4 | 621.7 |
| 7.5° | 623.4 | 620.0 | 612.0 | 614.3 | 611.5 |
| 10° | 616.6 | 612.6 | 601.2 | 599.5 | 596.1 |
| 12.5° | 608.1 | 602.9 | 587.6 | 584.2 | 577.9 |
| 15° | 597.8 | 591.6 | 572.2 | 561.4 | 555.7 |
| 17.5° | 585.9 | 576.8 | 552.9 | 540.4 | 531.3 |
| 20° | 572.2 | 560.8 | 532.4 | 518.2 | 505.7 |
| 22.5° | 557.4 | 544.3 | 511.4 | 492.0 | 483.5 |
| 25° | 542.6 | 524.4 | 486.9 | 463.6 | 455.0 |
| 27.5° | 525.0 | 505.7 | 464.1 | 437.4 | 424.3 |
| 30° | 506.2 | 484.6 | 439.1 | 410.1 | 394.8 |
| 32.5° | 488.0 | 461.9 | 415.2 | 381.1 | 366.9 |
| 35° | 467.6 | 438.5 | 388.5 | 352.7 | 340.1 |
| 37.5° | 447.7 | 416.4 | 363.5 | 324.2 | 310.0 |
| 40° | 426.6 | 392.5 | 337.3 | 296.9 | 282.1 |
| 42.5° | 405.0 | 368.6 | 311.1 | 269.0 | 254.8 |
| 45° | 382.2 | 344.1 | 284.4 | 244.0 | 230.4 |
| 47.5° | 360.6 | 320.2 | 258.8 | 218.4 | 205.9 |
| 50° | 336.7 | 296.3 | 233.8 | 194.5 | 182.6 |
| 52.5° | 313.4 | 270.8 | 209.9 | 172.3 | 161.5 |
| 55° | 290.7 | 246.3 | 184.9 | 150.7 | 139.9 |
| 57.5° | 267.3 | 221.8 | 162.7 | 130.8 | 121.7 |
| 60° | 243.4 | 197.9 | 139.4 | 110.3 | 101.2 |
| 62.5° | 220.1 | 174.6 | 119.4 | 92.1 | 87.6 |
| 65° | 196.2 | 150.2 | 99.0 | 79.6 | 77.9 |
| 67.5° | 173.5 | 127.4 | 79.6 | 70.0 | 68.3 |
| 70° | 149.6 | 105.2 | 66.0 | 60.3 | 58.0 |
| 72.5° | 126.8 | 84.8 | 55.2 | 50.6 | 49.5 |
| 75° | 104.7 | 64.8 | 45.5 | 41.5 | 41.0 |
| 77.5° | 82.5 | 46.1 | 35.8 | 33.6 | 32.4 |
| 80° | 62.0 | 33.0 | 27.3 | 25.0 | 25.0 |
| 82.5° | 43.2 | 22.2 | 18.8 | 17.6 | 17.6 |
| 85° | 24.5 | 12.5 | 10.8 | 10.8 | 10.8 |
| 87.5° | 9.1 | 4.6 | 4.6 | 4.0 | 4.0 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)