

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: P334681

Luminaire Tested: **S123IP-S585U940-4F0-1E-UDD-1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P334681
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-9)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S123IP-S585U940-4F0-1E-UDD-1
Description: DEFINE 3 INDIRECT LED LUMINAIRE, FLUSH SATIN WHITE DIFFUSER
PENDANT MOUNT, 585 LUMENS PER FOOT
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

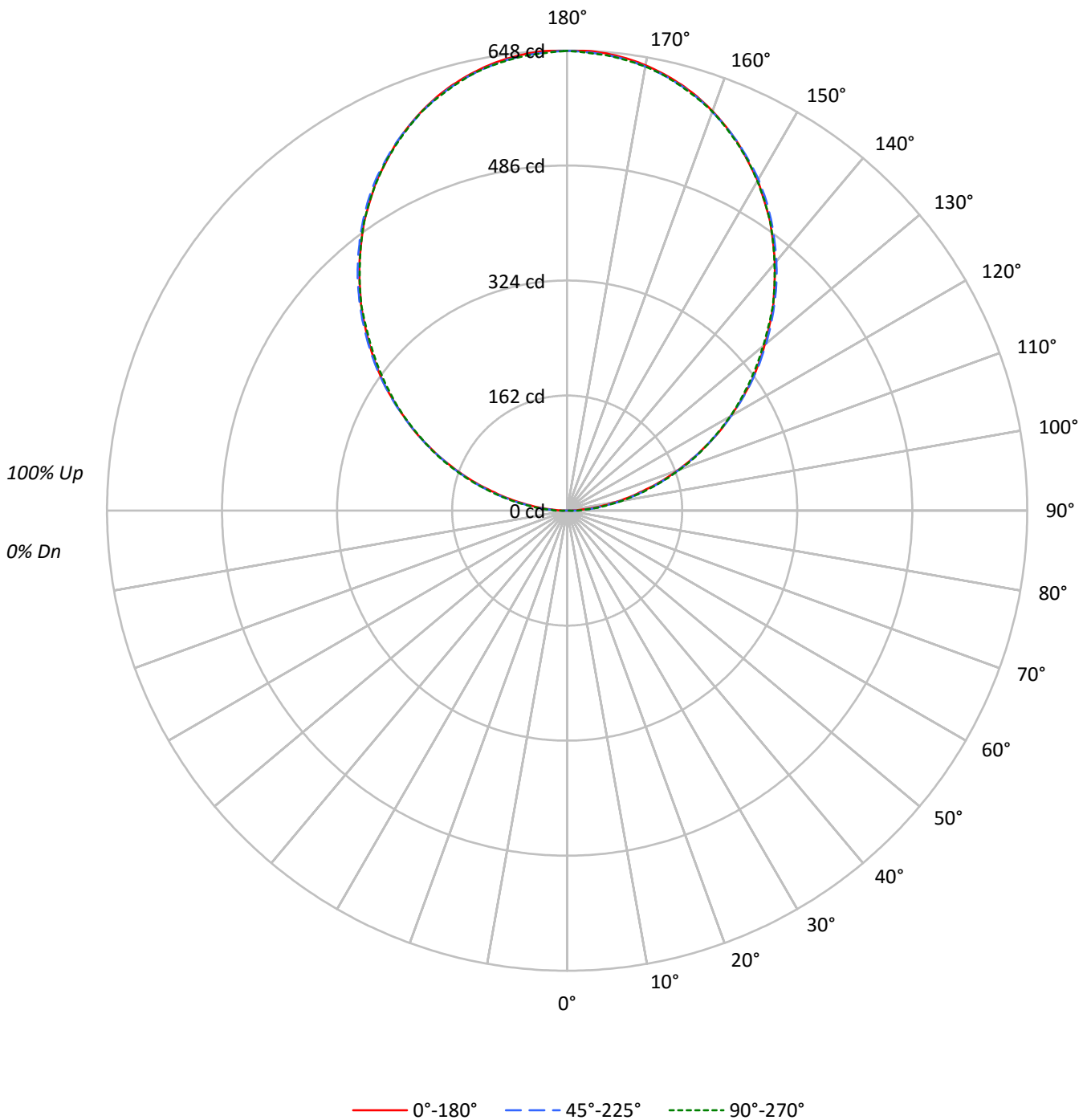
Lumens per Lamp: N/A
Luminaire Lumens: 1795.4 lumens
Efficiency: N/A
Efficacy: 95.5 lumens/watt
Spacing Criteria (0/90/45): - / - / -
Luminous Opening: Rectangular (W 0.25' x L: 4' x H: 0')
CIE Type: Indirect

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



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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 | 95 | 95 | 95 | 95 | 81 | 81 | 81 | 81 | 56 | 56 | 56 | 32 | 32 | 32 | 10 | 10 | 10 | 0 |
| 1 | 87 | 83 | 79 | 76 | 74 | 71 | 68 | 65 | 48 | 47 | 45 | 28 | 27 | 26 | 9 | 9 | 8 | 0 |
| 2 | 79 | 72 | 66 | 62 | 67 | 62 | 57 | 53 | 42 | 40 | 37 | 24 | 23 | 22 | 8 | 7 | 7 | 0 |
| 3 | 72 | 63 | 56 | 51 | 61 | 54 | 49 | 44 | 37 | 34 | 31 | 21 | 20 | 18 | 7 | 6 | 6 | 0 |
| 4 | 65 | 56 | 48 | 43 | 56 | 48 | 42 | 37 | 33 | 29 | 26 | 19 | 17 | 16 | 6 | 6 | 5 | 0 |
| 5 | 60 | 49 | 42 | 36 | 51 | 42 | 36 | 32 | 29 | 25 | 22 | 17 | 15 | 13 | 5 | 5 | 4 | 0 |
| 6 | 55 | 44 | 36 | 31 | 47 | 38 | 32 | 27 | 26 | 22 | 19 | 15 | 13 | 11 | 5 | 4 | 4 | 0 |
| 7 | 50 | 39 | 32 | 27 | 43 | 34 | 28 | 23 | 23 | 19 | 17 | 14 | 11 | 10 | 4 | 4 | 3 | 0 |
| 8 | 47 | 35 | 28 | 23 | 40 | 30 | 24 | 20 | 21 | 17 | 14 | 12 | 10 | 9 | 4 | 3 | 3 | 0 |
| 9 | 43 | 32 | 25 | 20 | 37 | 27 | 22 | 18 | 19 | 15 | 13 | 11 | 9 | 8 | 4 | 3 | 3 | 0 |
| 10 | 40 | 29 | 22 | 18 | 34 | 25 | 19 | 16 | 17 | 14 | 11 | 10 | 8 | 7 | 3 | 3 | 2 | 0 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|----|-----|-----|
| 0° | 0 | 0 | 0 |
| 5° | 0 | 0 | 0 |
| 10° | 0 | 0 | 0 |
| 15° | 0 | 0 | 0 |
| 20° | 0 | 0 | 0 |
| 25° | 0 | 0 | 0 |
| 30° | 0 | 0 | 0 |
| 35° | 0 | 0 | 0 |
| 40° | 0 | 0 | 0 |
| 45° | 0 | 0 | 0 |
| 50° | 0 | 0 | 0 |
| 55° | 0 | 0 | 0 |
| 60° | 0 | 0 | 0 |
| 65° | 0 | 0 | 0 |
| 70° | 0 | 0 | 0 |
| 75° | 0 | 0 | 0 |
| 80° | 0 | 0 | 0 |
| 85° | 0 | 0 | 0 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 0.0 | 0.0 |
| 10°-20° | 0.0 | 0.0 |
| 20°-30° | 0.0 | 0.0 |
| 30°-40° | 0.0 | 0.0 |
| 40°-50° | 0.0 | 0.0 |
| 50°-60° | 0.0 | 0.0 |
| 60°-70° | 0.0 | 0.0 |
| 70°-80° | 0.0 | 0.0 |
| 80°-90° | 1.4 | 0.1 |
| 90°-100° | 41.7 | 2.3 |
| 100°-110° | 126.2 | 7.0 |
| 110°-120° | 214.8 | 12.0 |
| 120°-130° | 282.5 | 15.7 |
| 130°-140° | 317.6 | 17.7 |
| 140°-150° | 312.2 | 17.4 |
| 150°-160° | 262.9 | 14.6 |
| 160°-170° | 175.0 | 9.7 |
| 170°-180° | 61.3 | 3.4 |
| 0°-30° | 0.0 | 0.0 |
| 0°-40° | 0.0 | 0.0 |
| 0°-60° | 0.0 | 0.0 |
| 0°-90° | 1.4 | 0.1 |
| 90°-120° | 382.6 | 21.3 |
| 90°-150° | 1294.9 | 72.1 |
| 90°-180° | 1794.0 | 99.9 |
| 0°-180° | 1795.4 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|-----|-------|-----|-------|-----|------|
| 0° | 0 | 0 | 0 | 0 | 0 | |
| 5° | 0 | 0 | 0 | 0 | 0 | 0 |
| 15° | 0 | 0 | 0 | 0 | 0 | 0 |
| 25° | 0 | 0 | 0 | 0 | 0 | 0 |
| 35° | 0 | 0 | 0 | 0 | 0 | 0 |
| 45° | 0 | 0 | 0 | 0 | 0 | 0 |
| 55° | 0 | 0 | 0 | 0 | 0 | 0 |
| 65° | 0 | 0 | 0 | 0 | 0 | 0 |
| 75° | 0 | 0 | 0 | 0 | 0 | 0 |
| 85° | 0 | 0 | 0 | 0 | 0 | 0 |
| 90° | 0 | 6 | 12 | 14 | 15 | 2 |
| 95° | 30 | 34 | 38 | 40 | 40 | 33 |
| 105° | 114 | 116 | 120 | 120 | 121 | 123 |
| 115° | 216 | 218 | 217 | 217 | 217 | 214 |
| 125° | 316 | 318 | 317 | 315 | 313 | 282 |
| 135° | 410 | 414 | 413 | 411 | 410 | 316 |
| 145° | 498 | 499 | 500 | 500 | 498 | 311 |
| 155° | 570 | 570 | 571 | 573 | 569 | 262 |
| 165° | 621 | 620 | 620 | 623 | 619 | 175 |
| 175° | 646 | 644 | 644 | 647 | 643 | 61 |
| 180° | 648 | 648 | 648 | 648 | 648 | |



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CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|-------|-------|-------|-------|-------|
| 0° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 2.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 7.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 10° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 12.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 15° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 17.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 20° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 22.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 25° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 27.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 30° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 32.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 35° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 37.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 40° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 42.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 45° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 47.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 50° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 52.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 55° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 57.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 60° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 62.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 65° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 67.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 70° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 72.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 75° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 77.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 80° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 82.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 85° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 87.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 90° | 0.5 | 5.6 | 12.2 | 14.2 | 15.3 |
| 92.5° | 15.3 | 18.3 | 21.4 | 22.9 | 21.9 |
| 95° | 30.0 | 33.6 | 37.6 | 39.7 | 39.7 |
| 97.5° | 49.3 | 51.9 | 54.9 | 57.5 | 57.0 |
| 100° | 69.2 | 72.2 | 74.8 | 76.3 | 77.3 |
| 102.5° | 92.1 | 93.6 | 97.1 | 98.7 | 98.2 |
| 105° | 114.4 | 115.5 | 120.0 | 120.0 | 121.1 |
| 107.5° | 140.9 | 141.4 | 143.4 | 145.0 | 144.4 |
| 110° | 165.3 | 166.3 | 167.3 | 169.4 | 168.4 |



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CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|-------|-------|-------|-------|-------|
| 112.5° | 190.7 | 191.2 | 191.2 | 193.8 | 193.8 |
| 115° | 216.2 | 217.7 | 216.7 | 217.2 | 216.7 |
| 117.5° | 242.1 | 242.6 | 241.6 | 241.6 | 240.1 |
| 120° | 266.0 | 269.1 | 266.5 | 266.0 | 265.0 |
| 122.5° | 290.9 | 293.0 | 291.9 | 290.4 | 288.9 |
| 125° | 316.4 | 317.9 | 316.9 | 314.8 | 312.8 |
| 127.5° | 339.8 | 342.8 | 341.8 | 338.7 | 336.7 |
| 130° | 363.2 | 367.2 | 365.7 | 363.7 | 360.1 |
| 132.5° | 386.6 | 390.6 | 389.6 | 387.1 | 384.5 |
| 135° | 410.5 | 413.5 | 413.0 | 411.0 | 410.0 |
| 137.5° | 432.3 | 434.9 | 436.4 | 433.9 | 432.3 |
| 140° | 455.2 | 457.8 | 458.3 | 457.8 | 454.2 |
| 142.5° | 476.1 | 478.6 | 479.6 | 479.1 | 476.6 |
| 145° | 497.9 | 499.0 | 500.5 | 500.0 | 497.9 |
| 147.5° | 516.8 | 518.8 | 520.3 | 520.3 | 517.3 |
| 150° | 536.6 | 537.6 | 538.6 | 538.6 | 535.6 |
| 152.5° | 552.9 | 554.4 | 554.9 | 555.9 | 553.4 |
| 155° | 570.2 | 570.2 | 570.7 | 572.7 | 569.1 |
| 157.5° | 584.9 | 584.4 | 584.9 | 587.0 | 583.9 |
| 160° | 598.6 | 597.6 | 597.6 | 600.2 | 598.1 |
| 162.5° | 610.9 | 609.3 | 609.8 | 612.4 | 608.8 |
| 165° | 621.0 | 619.5 | 619.5 | 622.6 | 619.0 |
| 167.5° | 629.7 | 627.6 | 628.2 | 631.2 | 628.2 |
| 170° | 636.8 | 634.8 | 634.8 | 638.3 | 634.8 |
| 172.5° | 642.4 | 640.4 | 640.4 | 643.4 | 639.8 |
| 175° | 646.0 | 643.9 | 643.9 | 647.0 | 643.4 |
| 177.5° | 648.0 | 646.0 | 646.0 | 649.0 | 645.4 |
| 180° | 647.5 | 647.5 | 647.5 | 647.5 | 647.5 |

(END OF REPORT)