

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: P335031

Luminaire Tested: **S125IP-S590U940-4F0-1E-UDD-1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P335031
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-11)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S125IP-S590U940-4F0-1E-UDD-1
Description: DEFINE 5 INDIRECT LED LUMINAIRE, FLUSH SATIN WHITE DIFFUSER
PENDANT MOUNT, 590 LUMENS PER FOOT
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

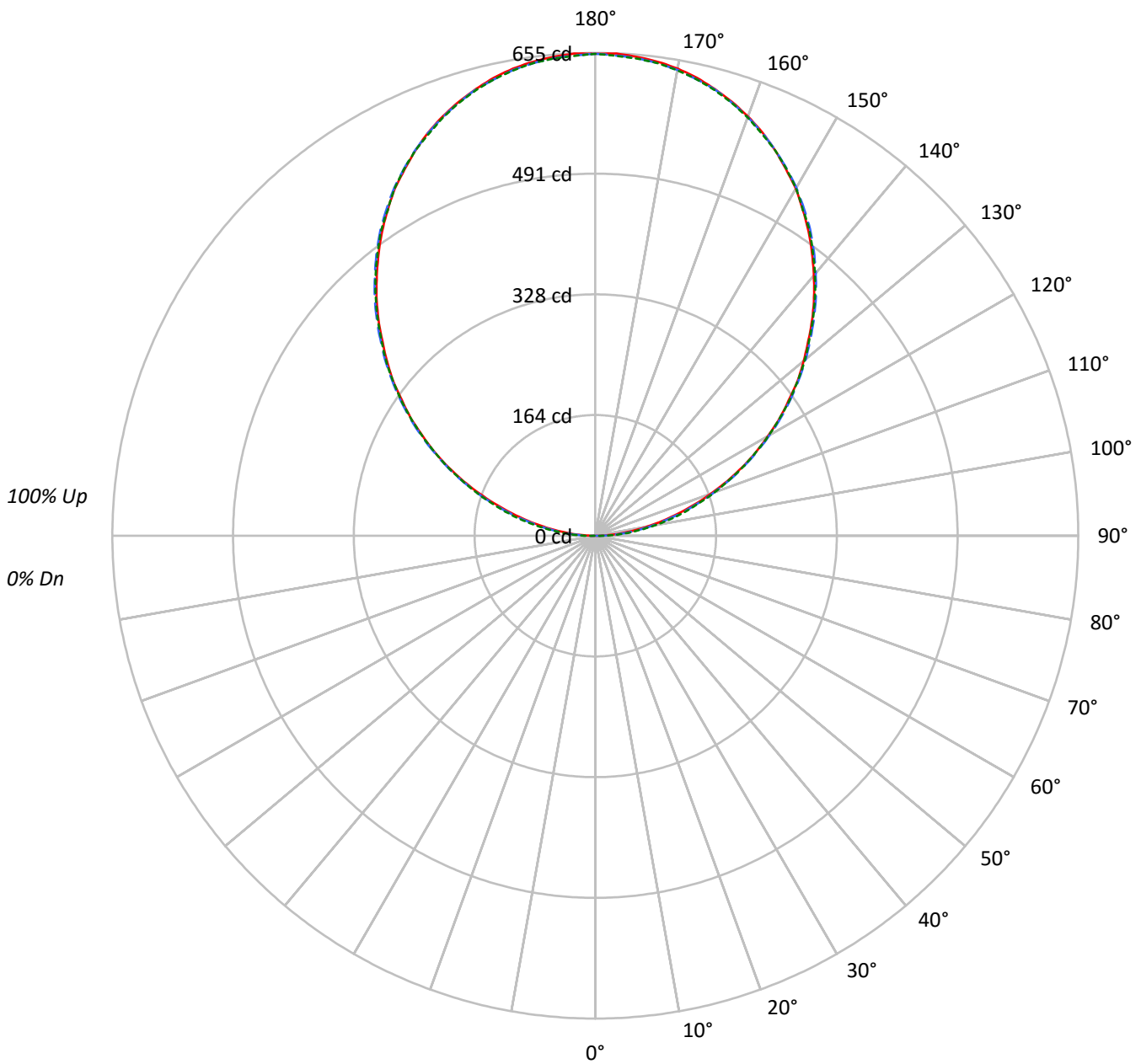
Lumens per Lamp: N/A
Luminaire Lumens: 1825.4 lumens
Efficiency: N/A
Efficacy: 97.1 lumens/watt
Spacing Criteria (0/90/45): - / - / -
Luminous Opening: Rectangular (W 0.42' x L: 4' x H: 0')
CIE Type: Indirect

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



— 0°-180° - - 45°-225° ···· 90°-270°



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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° | 1.0 | 0.1 |
| 90°-100° | 43.5 | 2.4 |
| 100°-110° | 129.1 | 7.1 |
| 110°-120° | 219.0 | 12.0 |
| 120°-130° | 288.3 | 15.8 |
| 130°-140° | 323.1 | 17.7 |
| 140°-150° | 316.7 | 17.3 |
| 150°-160° | 266.0 | 14.6 |
| 160°-170° | 176.8 | 9.7 |
| 170°-180° | 61.9 | 3.4 |
| 0°-30° | 0.0 | 0.0 |
| 0°-40° | 0.0 | 0.0 |
| 0°-60° | 0.0 | 0.0 |
| 0°-90° | 1.0 | 0.1 |
| 90°-120° | 391.6 | 21.5 |
| 90°-150° | 1319.7 | 72.3 |
| 90°-180° | 1824.0 | 99.9 |
| 0°-180° | 1825.4 | 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 | 5 | 8 | 11 | 12 | 2 |
| 95° | 33 | 34 | 39 | 43 | 44 | 35 |
| 105° | 116 | 118 | 122 | 125 | 126 | 124 |
| 115° | 219 | 221 | 222 | 222 | 221 | 217 |
| 125° | 320 | 323 | 324 | 322 | 322 | 287 |
| 135° | 416 | 419 | 420 | 420 | 418 | 321 |
| 145° | 504 | 506 | 508 | 508 | 506 | 315 |
| 155° | 577 | 577 | 577 | 579 | 577 | 266 |
| 165° | 627 | 626 | 627 | 629 | 626 | 177 |
| 175° | 652 | 650 | 650 | 653 | 650 | 62 |
| 180° | 654 | 654 | 654 | 654 | 654 | |



TEST NUMBER: P335031

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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 | 4.6 | 8.1 | 10.7 | 12.2 |
| 92.5° | 15.3 | 17.8 | 22.4 | 25.9 | 27.0 |
| 95° | 33.1 | 34.1 | 39.2 | 42.7 | 43.7 |
| 97.5° | 50.9 | 51.4 | 58.5 | 61.6 | 62.1 |
| 100° | 71.2 | 71.2 | 77.8 | 82.4 | 83.4 |
| 102.5° | 93.1 | 95.6 | 98.2 | 103.3 | 104.8 |
| 105° | 116.0 | 118.5 | 121.6 | 124.6 | 126.2 |
| 107.5° | 140.9 | 143.5 | 146.0 | 147.5 | 147.5 |
| 110° | 166.9 | 169.4 | 170.9 | 172.4 | 171.9 |



TEST NUMBER: P335031

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CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|-------|-------|-------|-------|-------|
| 112.5° | 193.3 | 194.3 | 196.4 | 196.9 | 195.8 |
| 115° | 219.2 | 221.3 | 222.3 | 221.8 | 221.3 |
| 117.5° | 245.7 | 246.2 | 247.2 | 247.7 | 245.7 |
| 120° | 270.1 | 272.7 | 273.2 | 273.2 | 271.1 |
| 122.5° | 296.6 | 297.1 | 298.6 | 298.1 | 296.6 |
| 125° | 320.0 | 323.0 | 323.5 | 322.5 | 322.0 |
| 127.5° | 345.9 | 347.4 | 347.9 | 347.4 | 346.4 |
| 130° | 368.8 | 371.3 | 372.4 | 371.9 | 370.8 |
| 132.5° | 391.7 | 396.3 | 395.8 | 395.3 | 393.7 |
| 135° | 416.1 | 419.2 | 419.7 | 419.7 | 417.6 |
| 137.5° | 439.0 | 442.1 | 443.1 | 443.6 | 441.0 |
| 140° | 460.9 | 463.4 | 464.9 | 466.0 | 463.4 |
| 142.5° | 482.8 | 484.8 | 486.8 | 487.3 | 484.8 |
| 145° | 504.1 | 506.2 | 507.7 | 507.7 | 506.2 |
| 147.5° | 524.0 | 525.5 | 526.5 | 528.0 | 524.0 |
| 150° | 543.8 | 543.3 | 545.3 | 545.3 | 544.3 |
| 152.5° | 560.1 | 561.1 | 561.6 | 563.1 | 561.1 |
| 155° | 576.9 | 576.9 | 577.4 | 579.4 | 576.9 |
| 157.5° | 592.1 | 591.1 | 591.6 | 593.6 | 590.1 |
| 160° | 605.3 | 603.8 | 604.3 | 606.4 | 603.8 |
| 162.5° | 617.0 | 616.0 | 616.0 | 618.6 | 615.5 |
| 165° | 627.2 | 626.2 | 626.7 | 628.7 | 625.7 |
| 167.5° | 636.4 | 634.3 | 634.3 | 637.4 | 634.3 |
| 170° | 643.5 | 641.5 | 641.5 | 644.5 | 641.0 |
| 172.5° | 648.6 | 646.6 | 646.6 | 649.6 | 646.6 |
| 175° | 652.1 | 650.1 | 650.1 | 653.2 | 649.6 |
| 177.5° | 654.7 | 652.7 | 652.1 | 655.2 | 651.6 |
| 180° | 653.7 | 653.7 | 653.7 | 653.7 | 653.7 |

(END OF REPORT)