

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: P335081

Luminaire Tested: **S125IP-S590U840-4F0-1E-UDD**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P335081  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-7)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: NEO-RAY  
Catalog Number: S125IP-S590U840-4F0-1E-UDD  
Description: DEFINE 5 INDIRECT LED LUMINAIRE, NO LENS  
PENDANT MOUNT, 590 LUMENS PER FOOT  
Light Source: 4000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2388.7 lumens  
Efficiency: N/A  
Efficacy: 127.1 lumens/watt  
Spacing Criteria (0/90/45): - / - / -  
Luminous Opening: Rectangular (W 0.42' x L: 4' x H: 0')  
CIE Type: Indirect

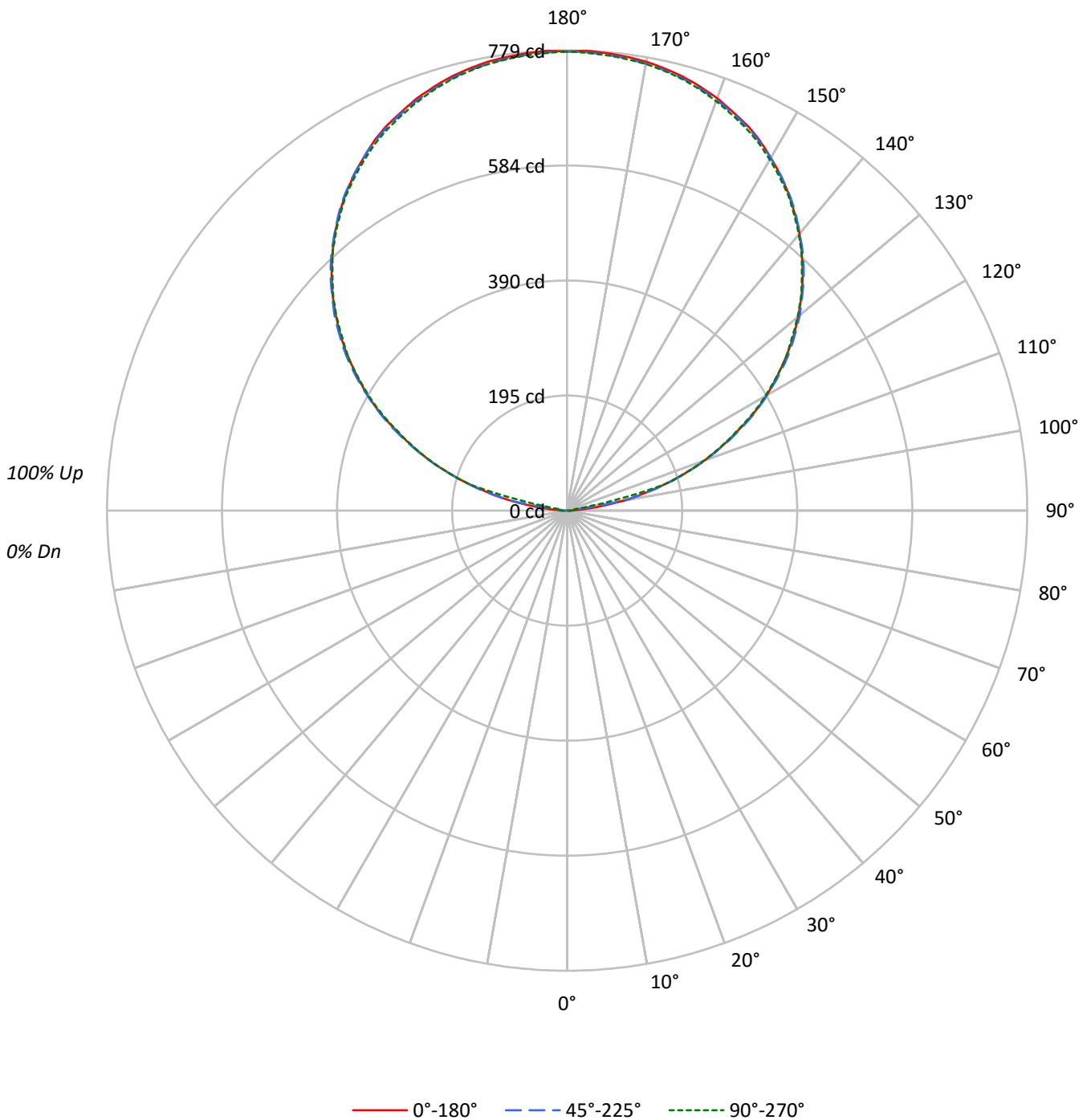
Input Watts (W): 18.8  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°   | 1.2    | 0.0       |
| 90°-100°  | 26.4   | 1.1       |
| 100°-110° | 175.4  | 7.3       |
| 110°-120° | 315.9  | 13.2      |
| 120°-130° | 405.5  | 17.0      |
| 130°-140° | 436.1  | 18.3      |
| 140°-150° | 409.3  | 17.1      |
| 150°-160° | 331.1  | 13.9      |
| 160°-170° | 214.1  | 9.0       |
| 170°-180° | 73.8   | 3.1       |
| 0°-30°    | 0.0    | 0.0       |
| 0°-40°    | 0.0    | 0.0       |
| 0°-60°    | 0.0    | 0.0       |
| 0°-90°    | 1.2    | 0.0       |
| 90°-120°  | 517.7  | 21.7      |
| 90°-150°  | 1768.5 | 74.0      |
| 90°-180°  | 2388.0 | 100.0     |
| 0°-180°   | 2388.7 | 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°  | 1   | 5     | 9   | 12    | 14  | 2    |
| 95°  | 33  | 31    | 9   | 12    | 12  | 40   |
| 105° | 169 | 172   | 172 | 172   | 171 | 179  |
| 115° | 318 | 321   | 322 | 319   | 316 | 315  |
| 125° | 452 | 456   | 456 | 454   | 452 | 404  |
| 135° | 564 | 568   | 566 | 565   | 562 | 435  |
| 145° | 654 | 655   | 655 | 656   | 652 | 409  |
| 155° | 720 | 717   | 718 | 720   | 715 | 332  |
| 165° | 760 | 756   | 757 | 760   | 756 | 215  |
| 175° | 777 | 774   | 774 | 779   | 774 | 74   |
| 180° | 777 | 777   | 777 | 777   | 777 |      |



TEST NUMBER: P335081

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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°    | 0.6   | 5.2   | 9.2   | 12.1  | 13.8  |
| 92.5°  | 10.9  | 5.8   | 9.2   | 12.1  | 12.7  |
| 95°    | 32.8  | 31.1  | 9.2   | 12.1  | 12.1  |
| 97.5°  | 61.6  | 65.1  | 10.4  | 11.5  | 12.1  |
| 100°   | 96.2  | 97.9  | 100.3 | 14.4  | 12.1  |
| 102.5° | 131.4 | 133.7 | 134.8 | 136.0 | 87.6  |
| 105°   | 169.4 | 171.7 | 171.7 | 171.7 | 171.1 |
| 107.5° | 208.6 | 208.6 | 209.7 | 210.3 | 208.0 |
| 110°   | 246.6 | 246.6 | 247.8 | 246.0 | 246.6 |



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**CANDELA DISTRIBUTION (continued):**

|        | 0°    | 22.5° | 45°   | 67.5° | 90°   |
|--------|-------|-------|-------|-------|-------|
| 112.5° | 282.3 | 284.1 | 284.6 | 282.3 | 281.2 |
| 115°   | 318.0 | 320.9 | 321.5 | 319.2 | 315.7 |
| 117.5° | 355.5 | 355.5 | 357.8 | 354.3 | 353.2 |
| 120°   | 390.1 | 389.5 | 391.2 | 390.1 | 387.2 |
| 122.5° | 420.6 | 423.5 | 424.1 | 422.9 | 419.4 |
| 125°   | 452.3 | 456.3 | 456.3 | 454.0 | 452.3 |
| 127.5° | 482.8 | 485.7 | 485.1 | 484.0 | 479.4 |
| 130°   | 510.5 | 513.4 | 513.9 | 512.2 | 509.3 |
| 132.5° | 538.1 | 541.6 | 539.9 | 539.9 | 537.0 |
| 135°   | 564.1 | 567.5 | 566.4 | 565.2 | 561.8 |
| 137.5° | 588.3 | 591.7 | 590.6 | 590.6 | 587.7 |
| 140°   | 611.9 | 613.0 | 612.5 | 613.6 | 610.2 |
| 142.5° | 633.2 | 633.8 | 634.9 | 634.9 | 631.5 |
| 145°   | 653.9 | 655.1 | 655.1 | 655.7 | 652.2 |
| 147.5° | 672.4 | 672.4 | 673.0 | 673.5 | 669.5 |
| 150°   | 689.7 | 688.5 | 689.7 | 690.8 | 686.2 |
| 152.5° | 706.4 | 703.5 | 704.7 | 705.8 | 701.8 |
| 155°   | 720.2 | 716.8 | 717.9 | 719.6 | 715.0 |
| 157.5° | 731.2 | 729.4 | 729.4 | 731.2 | 726.5 |
| 160°   | 742.7 | 739.2 | 739.8 | 742.1 | 737.5 |
| 162.5° | 751.9 | 748.4 | 749.0 | 752.5 | 747.3 |
| 165°   | 760.0 | 756.5 | 757.1 | 760.5 | 755.9 |
| 167.5° | 766.3 | 762.8 | 763.4 | 767.5 | 762.3 |
| 170°   | 771.5 | 767.5 | 768.0 | 772.6 | 767.5 |
| 172.5° | 774.9 | 770.9 | 772.1 | 776.1 | 770.9 |
| 175°   | 777.2 | 773.8 | 774.4 | 779.0 | 773.8 |
| 177.5° | 779.0 | 775.5 | 776.1 | 780.1 | 775.5 |
| 180°   | 777.2 | 777.2 | 777.2 | 777.2 | 777.2 |

(END OF REPORT)