

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: P334416

Luminaire Tested: **S125RDP-S610D840-4F0-1E-UDD-F**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P334416  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-27)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: NEO-RAY  
Catalog Number: S125RDP-S610D840-4F0-1E-UDD-F  
Description: DEFINE 5 REGRESSED DIRECT LED LUMINAIRE, FLUSH SATIN WHITE DIFFUSER  
PENDANT/SURFACE/WALL MOUNT, 610 LUMENS PER FOOT  
Light Source: 4000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2268.3 lumens  
Efficiency: N/A  
Efficacy: 120.7 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.11 / 1.25  
Luminous Opening: Rectangular (W 0.42' x L: 4' x H: 0')  
CIE Type: Direct

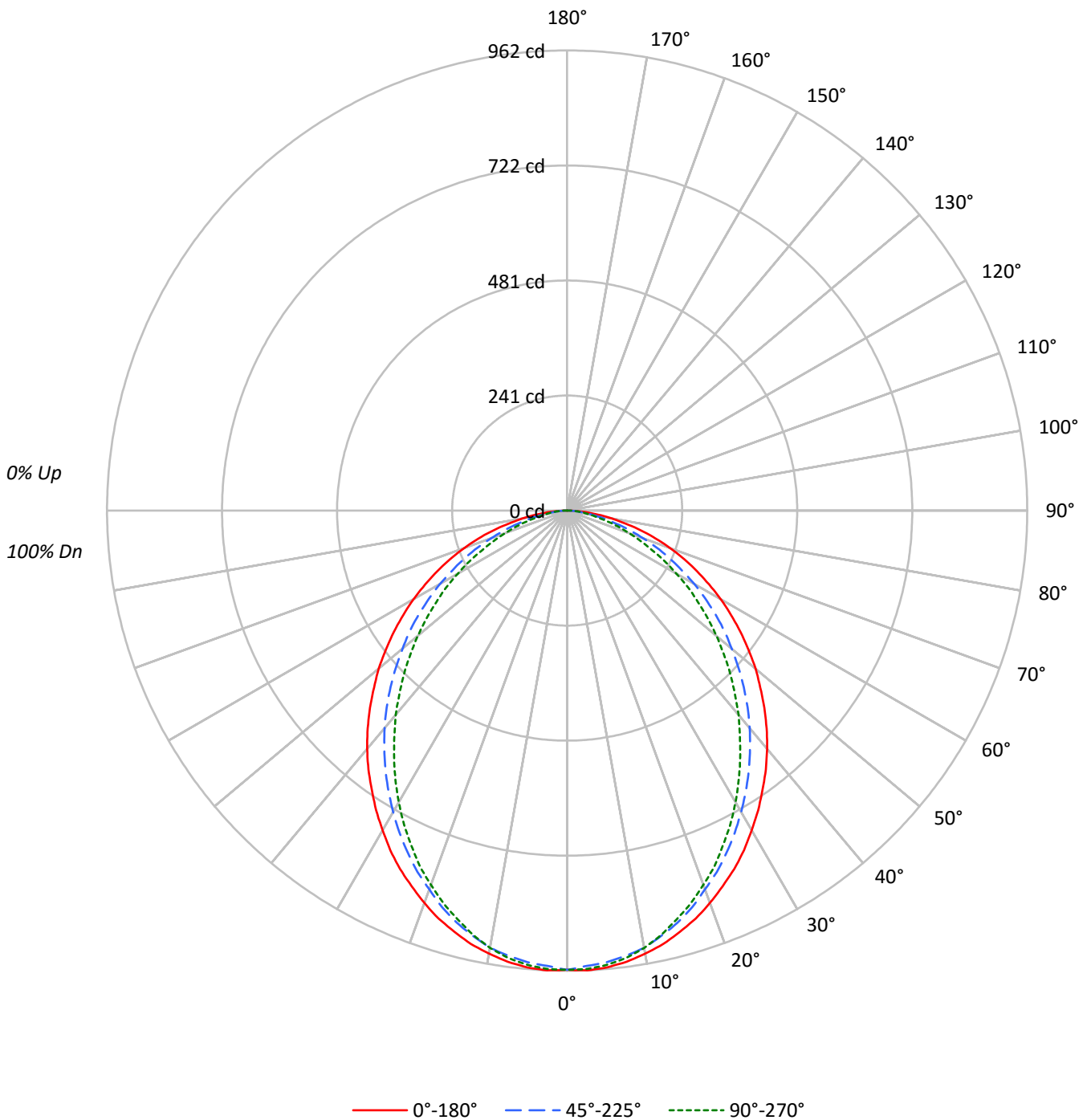
Input Watts (W): 18.8  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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   | 109 | 105 | 101 | 97  | 107 | 103 | 99  | 96  | 99  | 96  | 93  |  | 95  | 92  | 90  |  | 91  | 89  | 87  | 85  |
| 2   | 100 | 92  | 86  | 80  | 98  | 90  | 84  | 79  | 87  | 82  | 78  |  | 84  | 79  | 76  |  | 81  | 77  | 74  | 72  |
| 3   | 92  | 82  | 74  | 68  | 89  | 80  | 73  | 67  | 77  | 71  | 66  |  | 74  | 69  | 65  |  | 72  | 67  | 64  | 61  |
| 4   | 84  | 73  | 64  | 58  | 82  | 71  | 64  | 57  | 69  | 62  | 57  |  | 67  | 61  | 56  |  | 64  | 59  | 55  | 53  |
| 5   | 78  | 65  | 57  | 50  | 76  | 64  | 56  | 50  | 62  | 55  | 49  |  | 60  | 54  | 49  |  | 58  | 53  | 48  | 46  |
| 6   | 72  | 59  | 50  | 44  | 70  | 58  | 50  | 44  | 56  | 49  | 44  |  | 55  | 48  | 43  |  | 53  | 47  | 43  | 41  |
| 7   | 67  | 54  | 45  | 39  | 65  | 53  | 45  | 39  | 51  | 44  | 39  |  | 50  | 43  | 39  |  | 49  | 43  | 38  | 36  |
| 8   | 62  | 49  | 41  | 35  | 61  | 48  | 41  | 35  | 47  | 40  | 35  |  | 46  | 39  | 35  |  | 45  | 39  | 34  | 33  |
| 9   | 58  | 45  | 37  | 32  | 57  | 45  | 37  | 32  | 44  | 37  | 32  |  | 42  | 36  | 31  |  | 41  | 36  | 31  | 29  |
| 10  | 55  | 42  | 34  | 29  | 54  | 41  | 34  | 29  | 40  | 34  | 29  |  | 39  | 33  | 29  |  | 39  | 33  | 29  | 27  |

**AVERAGE LUMINANCE (cd/sqm):**

|     | 0°   | 45°  | 90°  |
|-----|------|------|------|
| 0°  | 6200 | 6200 | 6200 |
| 5°  | 6215 | 6144 | 6182 |
| 10° | 6168 | 6086 | 6086 |
| 15° | 6094 | 5963 | 5915 |
| 20° | 6000 | 5791 | 5721 |
| 25° | 5890 | 5622 | 5498 |
| 30° | 5753 | 5424 | 5251 |
| 35° | 5614 | 5219 | 4973 |
| 40° | 5483 | 5007 | 4701 |
| 45° | 5325 | 4769 | 4404 |
| 50° | 5165 | 4509 | 4094 |
| 55° | 4980 | 4262 | 3764 |
| 60° | 4796 | 3962 | 3409 |
| 65° | 4577 | 3613 | 3003 |
| 70° | 4326 | 3176 | 2587 |
| 75° | 3980 | 2677 | 2153 |
| 80° | 3507 | 2105 | 1808 |
| 85° | 2957 | 1719 | 1615 |



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 90.4   | 4.0       |
| 10°-20°   | 252.5  | 11.1      |
| 20°-30°   | 366.1  | 16.1      |
| 30°-40°   | 417.1  | 18.4      |
| 40°-50°   | 406.6  | 17.9      |
| 50°-60°   | 342.2  | 15.1      |
| 60°-70°   | 239.8  | 10.6      |
| 70°-80°   | 122.9  | 5.4       |
| 80°-90°   | 30.7   | 1.4       |
| 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°    | 709.0  | 31.3      |
| 0°-40°    | 1126.1 | 49.6      |
| 0°-60°    | 1874.9 | 82.7      |
| 0°-90°    | 2268.3 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 2268.3 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°  | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|-----|-------|-----|-------|-----|------|
| 0°  | 960 | 960   | 960 | 960   | 960 |      |
| 5°  | 959 | 956   | 948 | 955   | 954 | 91   |
| 15° | 912 | 907   | 892 | 891   | 885 | 257  |
| 25° | 827 | 816   | 789 | 780   | 772 | 380  |
| 35° | 712 | 695   | 662 | 641   | 631 | 446  |
| 45° | 583 | 562   | 522 | 493   | 482 | 450  |
| 55° | 442 | 419   | 378 | 346   | 334 | 396  |
| 65° | 300 | 275   | 236 | 207   | 196 | 297  |
| 75° | 160 | 138   | 107 | 91    | 86  | 169  |
| 85° | 40  | 27    | 23  | 22    | 22  | 46   |
| 90° | 0   | 0     | 0   | 0     | 0   |      |



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°    | 22.5° | 45°   | 67.5° | 90°   |
|-------|-------|-------|-------|-------|-------|
| 0°    | 960.0 | 960.0 | 960.0 | 960.0 | 960.0 |
| 2.5°  | 962.2 | 960.0 | 952.8 | 960.0 | 959.3 |
| 5°    | 958.6 | 955.7 | 947.7 | 955.0 | 953.5 |
| 7.5°  | 951.3 | 948.4 | 939.0 | 944.8 | 943.4 |
| 10°   | 940.5 | 938.3 | 928.1 | 930.3 | 928.1 |
| 12.5° | 928.1 | 925.2 | 910.7 | 912.2 | 908.6 |
| 15°   | 911.5 | 907.1 | 891.9 | 891.2 | 884.6 |
| 17.5° | 894.1 | 887.5 | 869.4 | 865.8 | 860.7 |
| 20°   | 873.0 | 865.8 | 842.6 | 839.0 | 832.4 |
| 22.5° | 849.8 | 842.6 | 817.9 | 809.9 | 804.9 |
| 25°   | 826.6 | 815.7 | 788.9 | 779.5 | 771.5 |
| 27.5° | 800.5 | 787.5 | 759.2 | 746.9 | 738.9 |
| 30°   | 771.5 | 757.7 | 727.3 | 710.6 | 704.1 |
| 32.5° | 743.2 | 726.6 | 695.4 | 676.5 | 667.8 |
| 35°   | 712.1 | 694.7 | 662.0 | 641.0 | 630.8 |
| 37.5° | 682.3 | 661.3 | 627.9 | 603.3 | 593.1 |
| 40°   | 650.4 | 628.7 | 593.9 | 566.3 | 557.6 |
| 42.5° | 617.1 | 594.6 | 558.3 | 532.2 | 518.5 |
| 45°   | 583.0 | 562.0 | 522.1 | 493.1 | 482.2 |
| 47.5° | 547.5 | 525.7 | 485.8 | 456.1 | 443.8 |
| 50°   | 514.1 | 490.2 | 448.8 | 418.4 | 407.5 |
| 52.5° | 477.8 | 453.2 | 414.8 | 381.4 | 370.5 |
| 55°   | 442.3 | 419.1 | 378.5 | 345.9 | 334.3 |
| 57.5° | 406.1 | 381.4 | 342.3 | 310.3 | 300.2 |
| 60°   | 371.3 | 345.9 | 306.7 | 274.8 | 263.9 |
| 62.5° | 334.3 | 310.3 | 270.5 | 241.5 | 230.6 |
| 65°   | 299.5 | 274.8 | 236.4 | 207.4 | 196.5 |
| 67.5° | 264.7 | 240.0 | 203.0 | 175.5 | 166.8 |
| 70°   | 229.1 | 204.5 | 168.2 | 145.7 | 137.0 |
| 72.5° | 194.3 | 170.4 | 137.0 | 116.7 | 111.7 |
| 75°   | 159.5 | 137.8 | 107.3 | 91.4  | 86.3  |
| 77.5° | 124.0 | 106.6 | 81.2  | 68.9  | 64.5  |
| 80°   | 94.3  | 76.9  | 56.6  | 50.0  | 48.6  |
| 82.5° | 65.3  | 50.0  | 37.7  | 35.5  | 34.8  |
| 85°   | 39.9  | 26.8  | 23.2  | 22.5  | 21.8  |
| 87.5° | 16.7  | 11.6  | 10.9  | 10.9  | 10.2  |
| 90°   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |

(END OF REPORT)