

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: P231709

Luminaire Tested: **S125-DR-2-35-X-0048-1-U-DD-1-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P231709
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29677)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S125-DR-2-35-X-0048-1-U-DD-1-W
Description: DEFINE 5 LED LINEAR DIRECT RECESSED LED LUMINAIRE WITH FLUSH LENS.
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4029.2 lumens
Efficiency: N/A
Efficacy: 94.6 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.15 / 1.29
Luminous Opening: Rectangular (W 0.39' x L: 3.92' x H: 0')
CIE Type: Direct

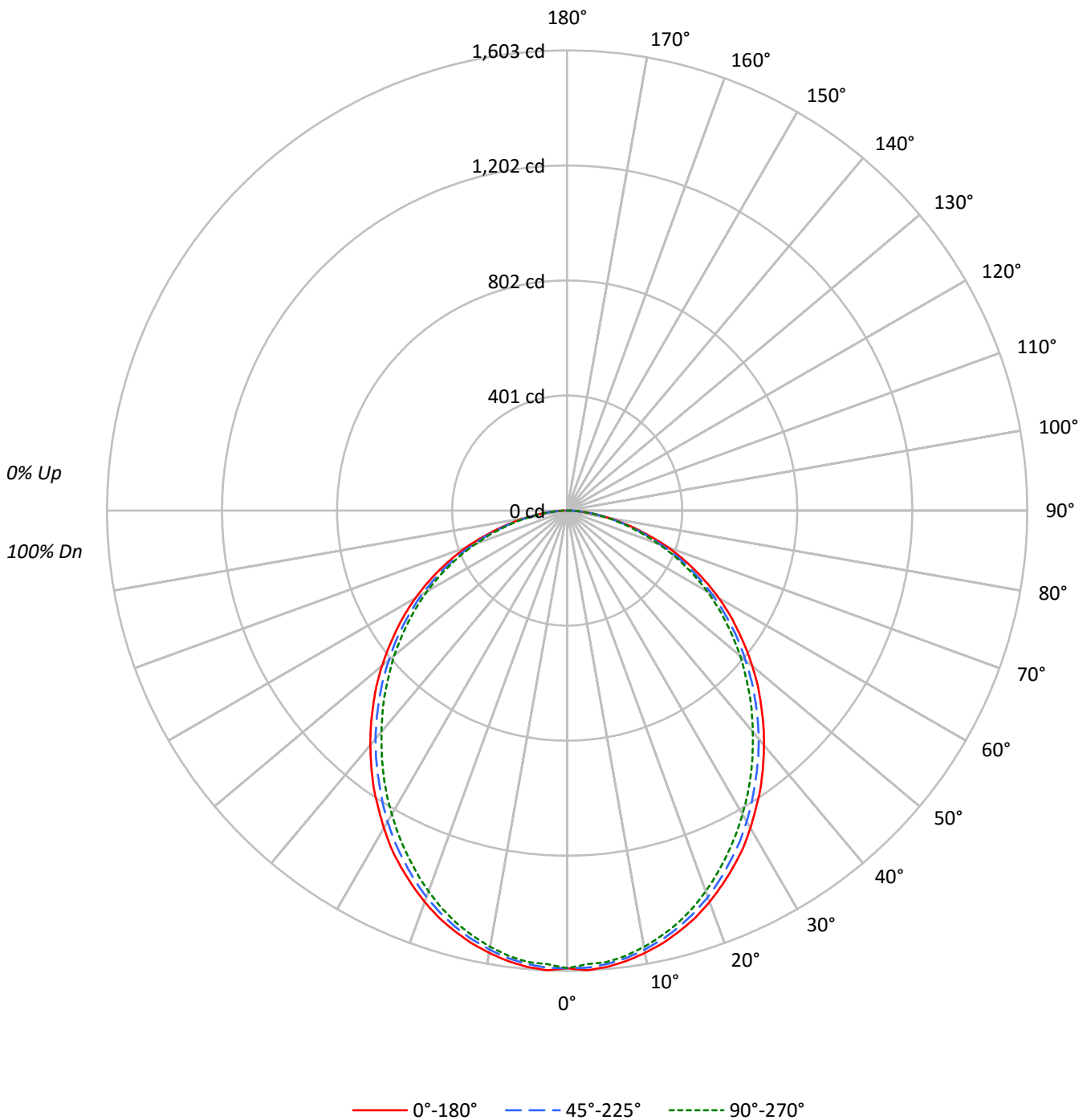
Input Watts (W): 42.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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 | 104 | 100 | 96 | 106 | 102 | 98 | 95 | 98 | 95 | 92 | 94 | 91 | 89 | 90 | 88 | 86 | 84 |
| 2 | 99 | 91 | 85 | 79 | 97 | 89 | 83 | 78 | 86 | 81 | 76 | 83 | 78 | 74 | 80 | 76 | 73 | 71 |
| 3 | 91 | 80 | 72 | 66 | 88 | 79 | 71 | 65 | 76 | 70 | 64 | 73 | 68 | 63 | 71 | 66 | 62 | 60 |
| 4 | 83 | 71 | 63 | 56 | 81 | 70 | 62 | 56 | 68 | 61 | 55 | 65 | 59 | 54 | 63 | 58 | 54 | 51 |
| 5 | 77 | 64 | 55 | 49 | 75 | 63 | 55 | 48 | 61 | 53 | 48 | 59 | 52 | 47 | 57 | 51 | 47 | 45 |
| 6 | 71 | 58 | 49 | 43 | 69 | 57 | 48 | 42 | 55 | 48 | 42 | 53 | 47 | 42 | 52 | 46 | 41 | 39 |
| 7 | 66 | 53 | 44 | 38 | 64 | 52 | 43 | 38 | 50 | 43 | 37 | 49 | 42 | 37 | 47 | 41 | 37 | 35 |
| 8 | 61 | 48 | 40 | 34 | 60 | 47 | 39 | 34 | 46 | 39 | 34 | 45 | 38 | 33 | 44 | 38 | 33 | 31 |
| 9 | 57 | 44 | 36 | 31 | 56 | 44 | 36 | 30 | 42 | 35 | 30 | 41 | 35 | 30 | 40 | 34 | 30 | 28 |
| 10 | 54 | 41 | 33 | 28 | 53 | 40 | 33 | 28 | 39 | 32 | 28 | 38 | 32 | 27 | 37 | 32 | 27 | 26 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|-------|-------|-------|
| 0° | 11233 | 11233 | 11233 |
| 5° | 11286 | 11216 | 11166 |
| 10° | 11194 | 11112 | 11041 |
| 15° | 11061 | 10958 | 10855 |
| 20° | 10881 | 10743 | 10583 |
| 25° | 10654 | 10467 | 10268 |
| 30° | 10388 | 10181 | 9939 |
| 35° | 10117 | 9849 | 9605 |
| 40° | 9815 | 9555 | 9255 |
| 45° | 9518 | 9221 | 8939 |
| 50° | 9227 | 8885 | 8621 |
| 55° | 8913 | 8565 | 8287 |
| 60° | 8607 | 8208 | 7928 |
| 65° | 8199 | 7797 | 7490 |
| 70° | 7679 | 7182 | 6947 |
| 75° | 6866 | 6521 | 6289 |
| 80° | 5925 | 5693 | 5576 |
| 85° | 4924 | 4811 | 4811 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 150.1 | 3.7 |
| 10°-20° | 422.0 | 10.5 |
| 20°-30° | 617.8 | 15.3 |
| 30°-40° | 714.5 | 17.7 |
| 40°-50° | 712.5 | 17.7 |
| 50°-60° | 623.8 | 15.5 |
| 60°-70° | 463.3 | 11.5 |
| 70°-80° | 255.9 | 6.4 |
| 80°-90° | 69.3 | 1.7 |
| 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° | 1189.8 | 29.5 |
| 0°-40° | 1904.3 | 47.3 |
| 0°-60° | 3240.7 | 80.4 |
| 0°-90° | 4029.2 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 4029.2 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|------|-------|------|-------|------|------|
| 0° | 1594 | 1594 | 1594 | 1594 | 1594 | |
| 5° | 1596 | 1578 | 1586 | 1580 | 1578 | 151 |
| 15° | 1516 | 1498 | 1502 | 1492 | 1488 | 427 |
| 25° | 1370 | 1349 | 1346 | 1325 | 1321 | 631 |
| 35° | 1176 | 1158 | 1145 | 1121 | 1117 | 735 |
| 45° | 955 | 942 | 925 | 900 | 897 | 737 |
| 55° | 726 | 716 | 697 | 677 | 674 | 649 |
| 65° | 492 | 480 | 468 | 455 | 449 | 487 |
| 75° | 252 | 247 | 240 | 234 | 231 | 269 |
| 85° | 61 | 60 | 60 | 58 | 60 | 72 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P231709

CATALOG NUMBER: S125-DR-2-35-X-0048-1-U-DD-1-W

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|--------|--------|--------|--------|--------|
| 0° | 1594.1 | 1594.1 | 1594.1 | 1594.1 | 1594.1 |
| 2.5° | 1602.6 | 1585.6 | 1594.1 | 1589.9 | 1581.4 |
| 5° | 1595.5 | 1578.5 | 1585.6 | 1580.0 | 1578.5 |
| 7.5° | 1582.8 | 1565.8 | 1572.9 | 1565.8 | 1564.4 |
| 10° | 1564.4 | 1547.4 | 1553.0 | 1545.9 | 1543.1 |
| 12.5° | 1543.1 | 1524.7 | 1530.4 | 1520.4 | 1517.6 |
| 15° | 1516.2 | 1497.8 | 1502.0 | 1492.1 | 1487.9 |
| 17.5° | 1486.4 | 1466.6 | 1469.4 | 1456.7 | 1452.4 |
| 20° | 1451.0 | 1432.6 | 1432.6 | 1414.2 | 1411.3 |
| 22.5° | 1411.3 | 1392.9 | 1391.5 | 1370.2 | 1367.4 |
| 25° | 1370.2 | 1349.0 | 1346.2 | 1324.9 | 1320.6 |
| 27.5° | 1326.3 | 1306.5 | 1300.8 | 1276.7 | 1272.5 |
| 30° | 1276.7 | 1256.9 | 1251.2 | 1225.7 | 1221.5 |
| 32.5° | 1225.7 | 1210.1 | 1198.8 | 1174.7 | 1170.4 |
| 35° | 1176.1 | 1157.7 | 1144.9 | 1120.8 | 1116.6 |
| 37.5° | 1120.8 | 1103.8 | 1092.5 | 1065.6 | 1061.3 |
| 40° | 1067.0 | 1051.4 | 1038.7 | 1011.7 | 1006.1 |
| 42.5° | 1011.7 | 997.6 | 982.0 | 955.1 | 952.2 |
| 45° | 955.1 | 942.3 | 925.3 | 899.8 | 897.0 |
| 47.5° | 899.8 | 885.6 | 868.6 | 844.5 | 840.3 |
| 50° | 841.7 | 828.9 | 810.5 | 789.3 | 786.4 |
| 52.5° | 783.6 | 772.3 | 755.3 | 732.6 | 729.8 |
| 55° | 725.5 | 715.6 | 697.2 | 677.3 | 674.5 |
| 57.5° | 668.8 | 657.5 | 640.5 | 622.1 | 619.2 |
| 60° | 610.7 | 599.4 | 582.4 | 566.8 | 562.5 |
| 62.5° | 551.2 | 539.9 | 524.3 | 510.1 | 507.3 |
| 65° | 491.7 | 480.4 | 467.6 | 454.9 | 449.2 |
| 67.5° | 432.2 | 422.3 | 409.5 | 398.2 | 395.3 |
| 70° | 372.7 | 362.8 | 348.6 | 340.1 | 337.2 |
| 72.5° | 310.3 | 301.8 | 294.7 | 286.2 | 283.4 |
| 75° | 252.2 | 246.6 | 239.5 | 233.8 | 231.0 |
| 77.5° | 197.0 | 192.7 | 189.9 | 184.2 | 184.2 |
| 80° | 146.0 | 143.1 | 140.3 | 137.4 | 137.4 |
| 82.5° | 99.2 | 97.8 | 97.8 | 94.9 | 96.4 |
| 85° | 60.9 | 59.5 | 59.5 | 58.1 | 59.5 |
| 87.5° | 29.8 | 28.3 | 28.3 | 26.9 | 28.3 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)