

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: P242794

Luminaire Tested: **S125DR-S1270D935-X4F0-XX-UDD-F-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P242794
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-12)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S125DR-S1270D935-X4F0-XX-UDD-F-W
Description: DEFINE 5 DIRECT RECESSED WITH SATIN FLUSH DIFFUSER
STANDARD LIGHT ENGINE
Light Source: (92) 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4198.1 lumens
Efficiency: N/A
Efficacy: 102.1 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.18 / 1.3
Luminous Opening: Rectangular (W 0.39' x L: 3.88' x H: 0')
CIE Type: Direct

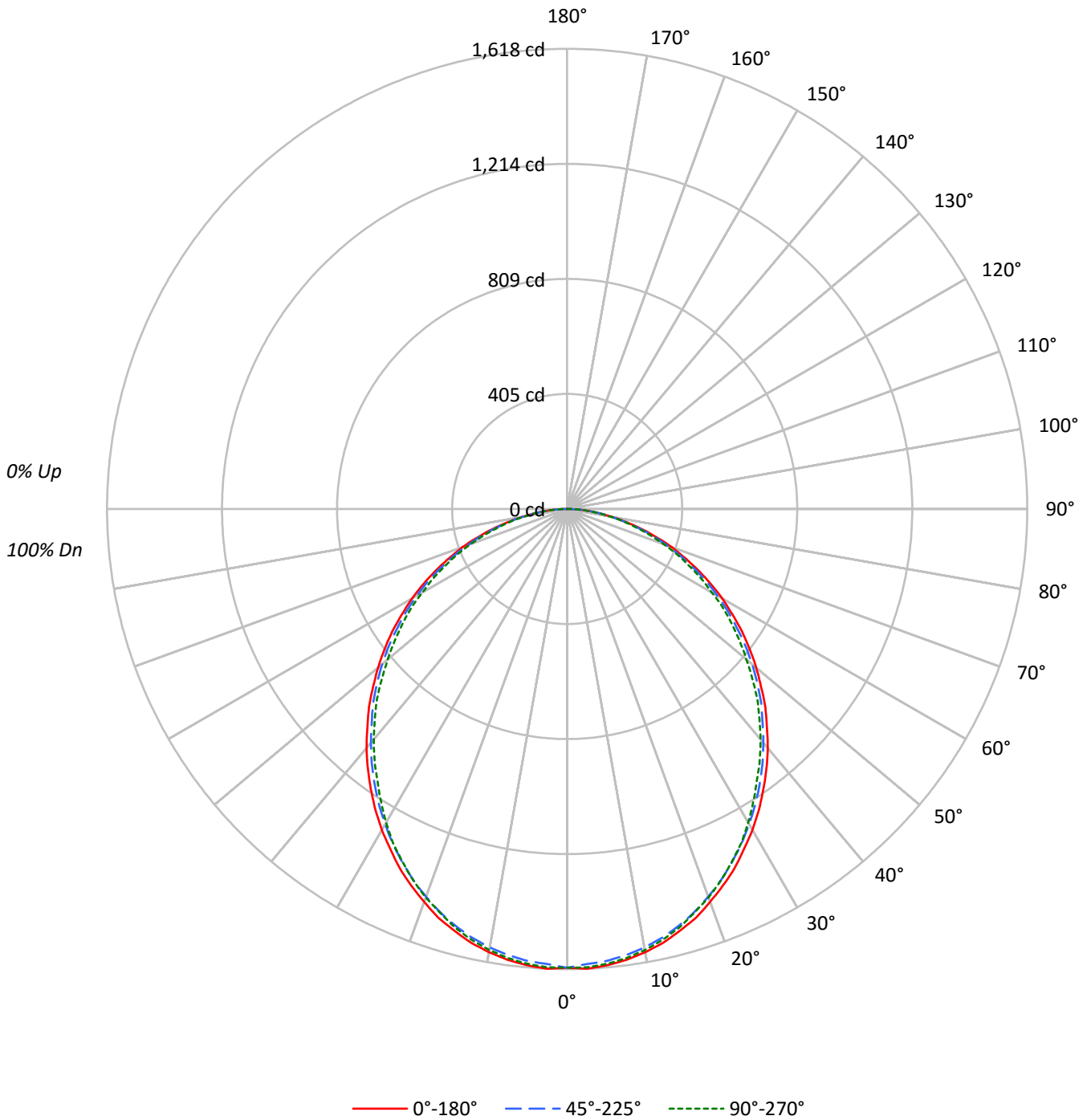
Input Watts (W): 41.1
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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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 | 94 | 92 | 94 | 91 | 89 | 90 | 88 | 86 | 84 |
| 2 | 99 | 91 | 84 | 79 | 97 | 89 | 83 | 78 | 86 | 80 | 76 | 82 | 78 | 74 | 79 | 76 | 72 | 70 |
| 3 | 91 | 80 | 72 | 66 | 88 | 79 | 71 | 65 | 76 | 69 | 64 | 73 | 67 | 63 | 70 | 66 | 62 | 59 |
| 4 | 83 | 71 | 62 | 56 | 81 | 70 | 62 | 55 | 67 | 60 | 55 | 65 | 59 | 54 | 63 | 58 | 53 | 51 |
| 5 | 76 | 64 | 55 | 48 | 74 | 63 | 54 | 48 | 60 | 53 | 47 | 58 | 52 | 47 | 57 | 51 | 46 | 44 |
| 6 | 71 | 57 | 49 | 42 | 69 | 56 | 48 | 42 | 55 | 47 | 42 | 53 | 46 | 41 | 51 | 46 | 41 | 39 |
| 7 | 66 | 52 | 43 | 37 | 64 | 51 | 43 | 37 | 50 | 42 | 37 | 48 | 42 | 37 | 47 | 41 | 36 | 34 |
| 8 | 61 | 48 | 39 | 33 | 60 | 47 | 39 | 33 | 46 | 38 | 33 | 44 | 38 | 33 | 43 | 37 | 33 | 31 |
| 9 | 57 | 44 | 36 | 30 | 56 | 43 | 35 | 30 | 42 | 35 | 30 | 41 | 34 | 30 | 40 | 34 | 30 | 28 |
| 10 | 54 | 40 | 33 | 27 | 52 | 40 | 32 | 27 | 39 | 32 | 27 | 38 | 32 | 27 | 37 | 31 | 27 | 25 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|-------|-------|-------|
| 0° | 11464 | 11464 | 11464 |
| 5° | 11489 | 11380 | 11453 |
| 10° | 11419 | 11300 | 11365 |
| 15° | 11295 | 11164 | 11211 |
| 20° | 11118 | 10974 | 10993 |
| 25° | 10928 | 10748 | 10737 |
| 30° | 10693 | 10504 | 10451 |
| 35° | 10440 | 10242 | 10098 |
| 40° | 10182 | 9957 | 9815 |
| 45° | 9902 | 9696 | 9505 |
| 50° | 9594 | 9383 | 9101 |
| 55° | 9297 | 9028 | 8776 |
| 60° | 8942 | 8671 | 8363 |
| 65° | 8520 | 8241 | 7961 |
| 70° | 8115 | 7743 | 7479 |
| 75° | 7395 | 7148 | 6904 |
| 80° | 6581 | 6475 | 6320 |
| 85° | 5725 | 5831 | 5513 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 152.2 | 3.6 |
| 10°-20° | 429.9 | 10.2 |
| 20°-30° | 634.7 | 15.1 |
| 30°-40° | 740.5 | 17.6 |
| 40°-50° | 743.7 | 17.7 |
| 50°-60° | 652.9 | 15.6 |
| 60°-70° | 486.3 | 11.6 |
| 70°-80° | 277.7 | 6.6 |
| 80°-90° | 80.2 | 1.9 |
| 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° | 1216.8 | 29.0 |
| 0°-40° | 1957.3 | 46.6 |
| 0°-60° | 3353.9 | 79.9 |
| 0°-90° | 4198.1 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 4198.1 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|------|-------|------|-------|------|------|
| 0° | 1613 | 1613 | 1613 | 1613 | 1613 | |
| 5° | 1610 | 1608 | 1595 | 1607 | 1605 | 153 |
| 15° | 1535 | 1531 | 1517 | 1524 | 1524 | 433 |
| 25° | 1394 | 1387 | 1370 | 1373 | 1369 | 641 |
| 35° | 1203 | 1198 | 1180 | 1174 | 1164 | 753 |
| 45° | 985 | 980 | 965 | 949 | 946 | 759 |
| 55° | 750 | 746 | 729 | 717 | 708 | 670 |
| 65° | 507 | 504 | 490 | 478 | 473 | 502 |
| 75° | 269 | 267 | 260 | 256 | 251 | 287 |
| 85° | 70 | 72 | 72 | 70 | 68 | 82 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P242794

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CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|--------|--------|--------|--------|--------|
| 0° | 1613.0 | 1613.0 | 1613.0 | 1613.0 | 1613.0 |
| 2.5° | 1618.1 | 1614.2 | 1601.5 | 1614.2 | 1613.0 |
| 5° | 1610.4 | 1607.8 | 1595.1 | 1606.6 | 1605.3 |
| 7.5° | 1598.9 | 1596.4 | 1582.3 | 1593.8 | 1592.5 |
| 10° | 1582.3 | 1579.8 | 1565.7 | 1575.9 | 1574.7 |
| 12.5° | 1561.9 | 1556.8 | 1544.0 | 1551.7 | 1551.7 |
| 15° | 1535.1 | 1531.3 | 1517.2 | 1523.6 | 1523.6 |
| 17.5° | 1507.0 | 1500.7 | 1486.6 | 1494.3 | 1487.9 |
| 20° | 1470.0 | 1467.5 | 1450.9 | 1459.8 | 1453.4 |
| 22.5° | 1433.0 | 1427.9 | 1412.6 | 1417.7 | 1413.9 |
| 25° | 1393.5 | 1387.1 | 1370.5 | 1373.0 | 1369.2 |
| 27.5° | 1347.5 | 1343.7 | 1327.1 | 1328.4 | 1324.6 |
| 30° | 1302.9 | 1299.0 | 1279.9 | 1277.3 | 1273.5 |
| 32.5° | 1254.4 | 1248.0 | 1231.4 | 1226.3 | 1218.6 |
| 35° | 1203.3 | 1198.2 | 1180.4 | 1174.0 | 1163.8 |
| 37.5° | 1151.0 | 1144.6 | 1128.0 | 1119.1 | 1112.7 |
| 40° | 1097.4 | 1091.0 | 1073.2 | 1061.7 | 1057.9 |
| 42.5° | 1040.0 | 1034.9 | 1017.0 | 1006.8 | 1000.4 |
| 45° | 985.1 | 980.0 | 964.7 | 949.4 | 945.6 |
| 47.5° | 925.1 | 926.4 | 907.3 | 892.0 | 883.0 |
| 50° | 867.7 | 863.9 | 848.6 | 832.0 | 823.1 |
| 52.5° | 809.0 | 806.5 | 789.9 | 775.8 | 765.6 |
| 55° | 750.3 | 746.5 | 728.6 | 717.2 | 708.2 |
| 57.5° | 687.8 | 686.5 | 671.2 | 655.9 | 652.1 |
| 60° | 629.1 | 624.0 | 610.0 | 597.2 | 588.3 |
| 62.5° | 567.9 | 564.0 | 552.5 | 538.5 | 532.1 |
| 65° | 506.6 | 504.0 | 490.0 | 478.5 | 473.4 |
| 67.5° | 446.6 | 441.5 | 431.3 | 421.1 | 418.6 |
| 70° | 390.5 | 384.1 | 372.6 | 365.0 | 359.9 |
| 72.5° | 329.2 | 325.4 | 319.0 | 310.1 | 305.0 |
| 75° | 269.3 | 266.7 | 260.3 | 256.5 | 251.4 |
| 77.5° | 213.1 | 211.8 | 208.0 | 205.4 | 201.6 |
| 80° | 160.8 | 160.8 | 158.2 | 157.0 | 154.4 |
| 82.5° | 114.8 | 112.3 | 112.3 | 109.7 | 109.7 |
| 85° | 70.2 | 71.5 | 71.5 | 70.2 | 67.6 |
| 87.5° | 34.5 | 34.5 | 33.2 | 33.2 | 30.6 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)