

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: P334418

Luminaire Tested: **S125RDW-S1090D840-4F0-1E-UDD-F**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P334418
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: S125RDW-S1090D840-4F0-1E-UDD-F
Description: DEFINE 5 REGRESSED DIRECT LED LUMINAIRE, FLUSH SATIN WHITE DIFFUSER
PENDANT/SURFACE/WALL MOUNT, 1090 LUMENS PER FOOT
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4028.5 lumens
Efficiency: N/A
Efficacy: 115.8 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

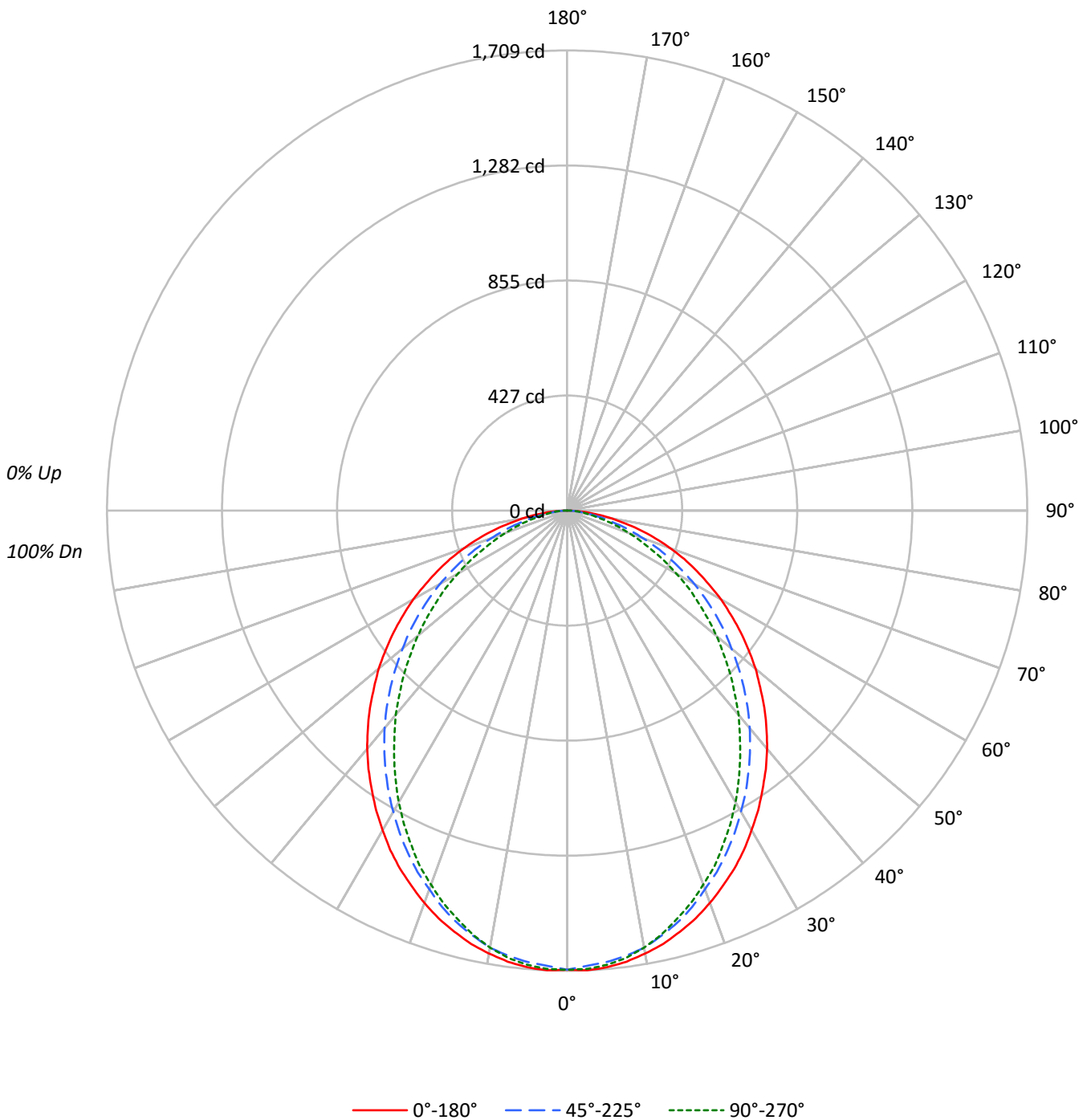
Input Watts (W): 34.8
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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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° | 11012 | 11012 | 11012 |
| 5° | 11037 | 10912 | 10979 |
| 10° | 10954 | 10810 | 10810 |
| 15° | 10824 | 10591 | 10505 |
| 20° | 10656 | 10285 | 10161 |
| 25° | 10462 | 9985 | 9764 |
| 30° | 10218 | 9633 | 9326 |
| 35° | 9970 | 9270 | 8833 |
| 40° | 9739 | 8892 | 8349 |
| 45° | 9457 | 8469 | 7822 |
| 50° | 9174 | 8010 | 7272 |
| 55° | 8846 | 7569 | 6685 |
| 60° | 8517 | 7037 | 6055 |
| 65° | 8128 | 6415 | 5333 |
| 70° | 7685 | 5642 | 4596 |
| 75° | 7069 | 4756 | 3825 |
| 80° | 6226 | 3738 | 3210 |
| 85° | 5246 | 3053 | 2860 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 160.5 | 4.0 |
| 10°-20° | 448.5 | 11.1 |
| 20°-30° | 650.3 | 16.1 |
| 30°-40° | 740.8 | 18.4 |
| 40°-50° | 722.1 | 17.9 |
| 50°-60° | 607.7 | 15.1 |
| 60°-70° | 425.9 | 10.6 |
| 70°-80° | 218.3 | 5.4 |
| 80°-90° | 54.4 | 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° | 1259.2 | 31.3 |
| 0°-40° | 2000.1 | 49.6 |
| 0°-60° | 3329.9 | 82.7 |
| 0°-90° | 4028.5 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 4028.5 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|------|-------|------|-------|------|------|
| 0° | 1705 | 1705 | 1705 | 1705 | 1705 | |
| 5° | 1702 | 1697 | 1683 | 1696 | 1694 | 161 |
| 15° | 1619 | 1611 | 1584 | 1583 | 1571 | 456 |
| 25° | 1468 | 1449 | 1401 | 1384 | 1370 | 676 |
| 35° | 1265 | 1234 | 1176 | 1138 | 1120 | 792 |
| 45° | 1035 | 998 | 927 | 876 | 856 | 799 |
| 55° | 786 | 744 | 672 | 614 | 594 | 702 |
| 65° | 532 | 488 | 420 | 368 | 349 | 527 |
| 75° | 283 | 245 | 191 | 162 | 153 | 299 |
| 85° | 71 | 48 | 41 | 40 | 39 | 82 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P334418

CATALOG NUMBER: S125RDW-S1090D840-4F0-1E-UDD-F

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|--------|--------|--------|--------|--------|
| 0° | 1705.1 | 1705.1 | 1705.1 | 1705.1 | 1705.1 |
| 2.5° | 1708.9 | 1705.1 | 1692.2 | 1705.1 | 1703.8 |
| 5° | 1702.5 | 1697.4 | 1683.2 | 1696.1 | 1693.5 |
| 7.5° | 1689.6 | 1684.5 | 1667.7 | 1678.0 | 1675.5 |
| 10° | 1670.3 | 1666.4 | 1648.4 | 1652.3 | 1648.4 |
| 12.5° | 1648.4 | 1643.3 | 1617.5 | 1620.1 | 1613.6 |
| 15° | 1618.8 | 1611.1 | 1584.0 | 1582.7 | 1571.1 |
| 17.5° | 1587.9 | 1576.3 | 1544.1 | 1537.7 | 1528.6 |
| 20° | 1550.5 | 1537.7 | 1496.5 | 1490.0 | 1478.4 |
| 22.5° | 1509.3 | 1496.5 | 1452.7 | 1438.5 | 1429.5 |
| 25° | 1468.1 | 1448.8 | 1401.2 | 1384.4 | 1370.2 |
| 27.5° | 1421.8 | 1398.6 | 1348.4 | 1326.5 | 1312.3 |
| 30° | 1370.2 | 1345.8 | 1291.7 | 1262.1 | 1250.5 |
| 32.5° | 1320.0 | 1290.4 | 1235.0 | 1201.5 | 1186.1 |
| 35° | 1264.6 | 1233.7 | 1175.8 | 1138.4 | 1120.4 |
| 37.5° | 1211.8 | 1174.5 | 1115.3 | 1071.5 | 1053.4 |
| 40° | 1155.2 | 1116.5 | 1054.7 | 1005.8 | 990.3 |
| 42.5° | 1095.9 | 1056.0 | 991.6 | 945.3 | 920.8 |
| 45° | 1035.4 | 998.1 | 927.2 | 875.7 | 856.4 |
| 47.5° | 972.3 | 933.7 | 862.8 | 810.0 | 788.1 |
| 50° | 913.1 | 870.6 | 797.2 | 743.1 | 723.8 |
| 52.5° | 848.7 | 804.9 | 736.6 | 677.4 | 658.1 |
| 55° | 785.6 | 744.4 | 672.2 | 614.3 | 593.7 |
| 57.5° | 721.2 | 677.4 | 607.9 | 551.2 | 533.2 |
| 60° | 659.4 | 614.3 | 544.8 | 488.1 | 468.8 |
| 62.5° | 593.7 | 551.2 | 480.4 | 428.8 | 409.5 |
| 65° | 531.9 | 488.1 | 419.8 | 368.3 | 349.0 |
| 67.5° | 470.1 | 426.3 | 360.6 | 311.7 | 296.2 |
| 70° | 407.0 | 363.2 | 298.8 | 258.9 | 243.4 |
| 72.5° | 345.1 | 302.6 | 243.4 | 207.3 | 198.3 |
| 75° | 283.3 | 244.7 | 190.6 | 162.3 | 153.3 |
| 77.5° | 220.2 | 189.3 | 144.2 | 122.3 | 114.6 |
| 80° | 167.4 | 136.5 | 100.5 | 88.9 | 86.3 |
| 82.5° | 115.9 | 88.9 | 67.0 | 63.1 | 61.8 |
| 85° | 70.8 | 47.6 | 41.2 | 39.9 | 38.6 |
| 87.5° | 29.6 | 20.6 | 19.3 | 19.3 | 18.0 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)