

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: P333914

Luminaire Tested: **S122RDS-S1005D940-4F0-1E-UDD-F**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333914
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-24)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S122RDS-S1005D940-4F0-1E-UDD-F
Description: DEFINE 2 REGRESSED DIRECT LED LUMINAIRE, FLUSH SATIN WHITE DIFFUSER
PENDANT/SURFACE/WALL MOUNT, 1005 LUMENS PER FOOT
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3003.4 lumens
Efficiency: N/A
Efficacy: 73.1 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 0.99 / 1.16
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Direct

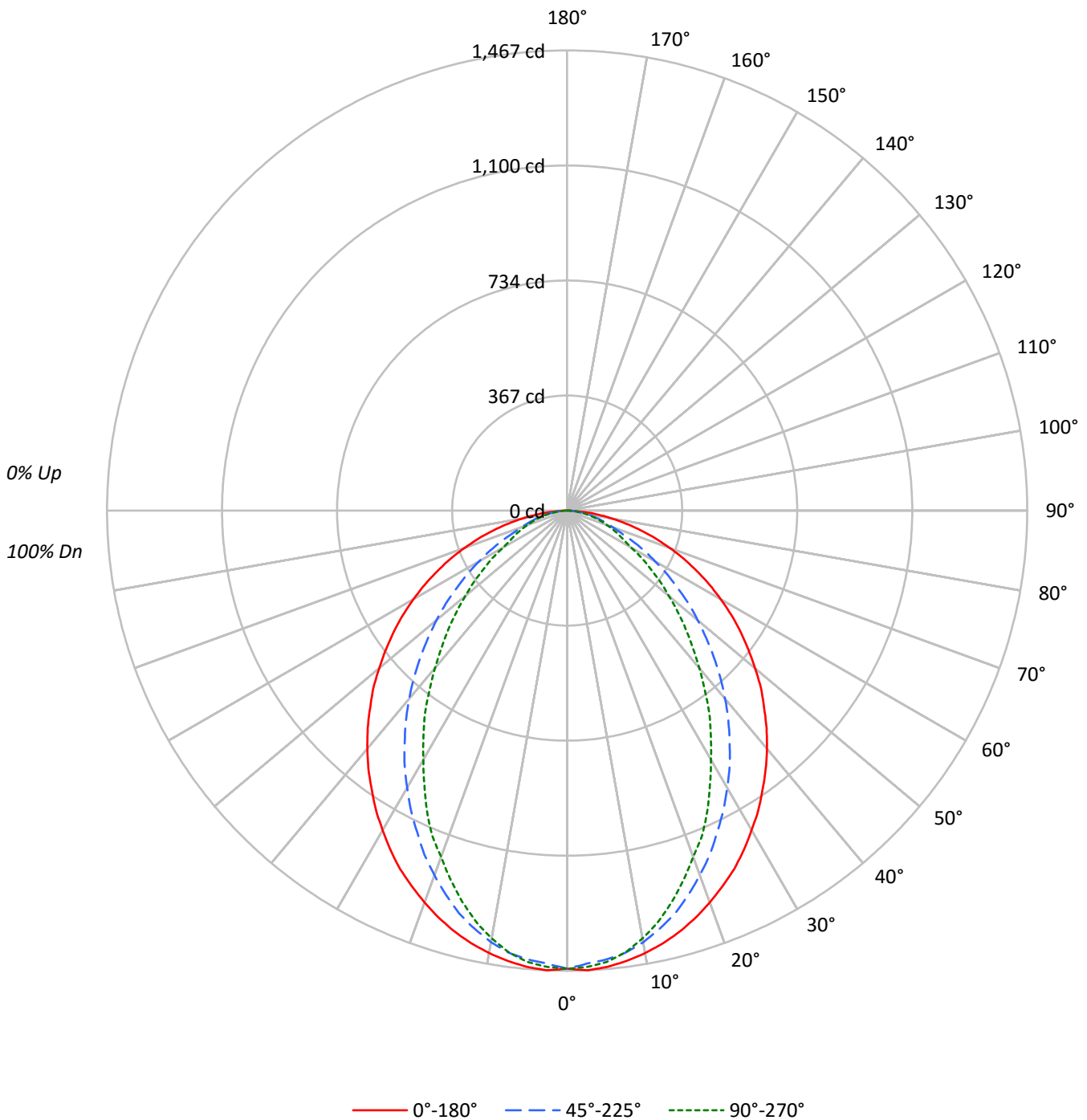
Input Watts (W): 41.1
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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 | 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 | | | | | 100 | | | |
| 1 | 110 | 106 | 102 | 98 | 107 | 103 | 100 | 97 | 99 | 96 | 94 | 95 | 93 | 91 | 92 | 90 | 88 | 86 | | | | | 86 | | | |
| 2 | 101 | 94 | 87 | 82 | 98 | 92 | 86 | 81 | 88 | 83 | 79 | 85 | 81 | 78 | 82 | 79 | 76 | 74 | | | | | 74 | | | |
| 3 | 93 | 83 | 76 | 70 | 90 | 82 | 75 | 69 | 79 | 73 | 68 | 76 | 71 | 67 | 74 | 69 | 66 | 64 | | | | | 64 | | | |
| 4 | 86 | 75 | 66 | 60 | 83 | 73 | 66 | 60 | 71 | 64 | 59 | 69 | 63 | 58 | 66 | 62 | 57 | 55 | | | | | 55 | | | |
| 5 | 79 | 67 | 59 | 53 | 77 | 66 | 58 | 52 | 64 | 57 | 52 | 62 | 56 | 51 | 60 | 55 | 51 | 49 | | | | | 49 | | | |
| 6 | 74 | 61 | 53 | 47 | 72 | 60 | 52 | 46 | 58 | 51 | 46 | 57 | 50 | 46 | 55 | 50 | 45 | 43 | | | | | 43 | | | |
| 7 | 68 | 56 | 47 | 42 | 67 | 55 | 47 | 42 | 53 | 46 | 41 | 52 | 46 | 41 | 51 | 45 | 41 | 39 | | | | | 39 | | | |
| 8 | 64 | 51 | 43 | 38 | 62 | 51 | 43 | 37 | 49 | 42 | 37 | 48 | 42 | 37 | 47 | 41 | 37 | 35 | | | | | 35 | | | |
| 9 | 60 | 47 | 39 | 34 | 59 | 47 | 39 | 34 | 46 | 39 | 34 | 44 | 38 | 34 | 44 | 38 | 34 | 32 | | | | | 32 | | | |
| 10 | 56 | 44 | 36 | 31 | 55 | 43 | 36 | 31 | 42 | 36 | 31 | 41 | 35 | 31 | 41 | 35 | 31 | 29 | | | | | 29 | | | |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|-------|-------|-------|
| 0° | 23578 | 23578 | 23578 |
| 5° | 23668 | 23284 | 23412 |
| 10° | 23487 | 22902 | 22707 |
| 15° | 23218 | 22223 | 21583 |
| 20° | 22844 | 21254 | 20187 |
| 25° | 22461 | 20154 | 18836 |
| 30° | 21929 | 19022 | 17100 |
| 35° | 21411 | 17791 | 15577 |
| 40° | 20891 | 16518 | 13816 |
| 45° | 20279 | 15088 | 12221 |
| 50° | 19653 | 13644 | 10655 |
| 55° | 19009 | 12090 | 9151 |
| 60° | 18264 | 10456 | 7595 |
| 65° | 17417 | 8787 | 6919 |
| 70° | 16409 | 7237 | 6364 |
| 75° | 15171 | 6594 | 5939 |
| 80° | 13398 | 5895 | 5402 |
| 85° | 10522 | 4650 | 4650 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 136.9 | 4.6 |
| 10°-20° | 375.7 | 12.5 |
| 20°-30° | 527.5 | 17.6 |
| 30°-40° | 575.0 | 19.1 |
| 40°-50° | 528.5 | 17.6 |
| 50°-60° | 415.0 | 13.8 |
| 60°-70° | 270.2 | 9.0 |
| 70°-80° | 139.1 | 4.6 |
| 80°-90° | 35.5 | 1.2 |
| 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° | 1040.1 | 34.6 |
| 0°-40° | 1615.1 | 53.8 |
| 0°-60° | 2558.7 | 85.2 |
| 0°-90° | 3003.4 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 3003.4 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|------|-------|------|-------|------|------|
| 0° | 1460 | 1460 | 1460 | 1460 | 1460 | |
| 5° | 1460 | 1454 | 1437 | 1448 | 1444 | 138 |
| 15° | 1389 | 1374 | 1330 | 1304 | 1291 | 391 |
| 25° | 1261 | 1218 | 1131 | 1077 | 1057 | 580 |
| 35° | 1086 | 1019 | 903 | 819 | 790 | 680 |
| 45° | 888 | 800 | 661 | 567 | 535 | 686 |
| 55° | 675 | 572 | 430 | 350 | 325 | 603 |
| 65° | 456 | 349 | 230 | 185 | 181 | 452 |
| 75° | 243 | 151 | 106 | 96 | 95 | 257 |
| 85° | 57 | 29 | 25 | 25 | 25 | 68 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P333914

CATALOG NUMBER: S122RDS-S1005D940-4F0-1E-UDD-F

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|--------|--------|--------|--------|--------|
| 0° | 1460.3 | 1460.3 | 1460.3 | 1460.3 | 1460.3 |
| 2.5° | 1467.0 | 1460.3 | 1445.8 | 1459.0 | 1456.4 |
| 5° | 1460.3 | 1453.7 | 1436.6 | 1448.5 | 1444.5 |
| 7.5° | 1448.5 | 1440.5 | 1422.0 | 1427.3 | 1420.7 |
| 10° | 1432.6 | 1423.3 | 1396.9 | 1392.9 | 1385.0 |
| 12.5° | 1412.8 | 1400.9 | 1365.2 | 1357.3 | 1342.7 |
| 15° | 1389.0 | 1374.4 | 1329.5 | 1304.4 | 1291.2 |
| 17.5° | 1361.2 | 1340.1 | 1284.6 | 1255.5 | 1234.4 |
| 20° | 1329.5 | 1303.1 | 1237.0 | 1204.0 | 1174.9 |
| 22.5° | 1295.2 | 1264.8 | 1188.1 | 1143.2 | 1123.3 |
| 25° | 1260.8 | 1218.5 | 1131.3 | 1077.1 | 1057.3 |
| 27.5° | 1219.8 | 1174.9 | 1078.4 | 1016.3 | 985.9 |
| 30° | 1176.2 | 1126.0 | 1020.3 | 952.9 | 917.2 |
| 32.5° | 1133.9 | 1073.1 | 964.8 | 885.5 | 852.4 |
| 35° | 1086.3 | 1018.9 | 902.6 | 819.4 | 790.3 |
| 37.5° | 1040.1 | 967.4 | 844.5 | 753.3 | 720.3 |
| 40° | 991.2 | 911.9 | 783.7 | 689.9 | 655.5 |
| 42.5° | 941.0 | 856.4 | 722.9 | 625.1 | 592.1 |
| 45° | 888.1 | 799.6 | 660.8 | 567.0 | 535.2 |
| 47.5° | 837.9 | 744.1 | 601.3 | 507.5 | 478.4 |
| 50° | 782.4 | 688.5 | 543.2 | 452.0 | 424.2 |
| 52.5° | 728.2 | 629.1 | 487.7 | 400.4 | 375.3 |
| 55° | 675.3 | 572.2 | 429.5 | 350.2 | 325.1 |
| 57.5° | 621.1 | 515.4 | 378.0 | 304.0 | 282.8 |
| 60° | 565.6 | 459.9 | 323.8 | 256.4 | 235.2 |
| 62.5° | 511.5 | 405.7 | 277.5 | 214.1 | 203.5 |
| 65° | 455.9 | 348.9 | 230.0 | 185.0 | 181.1 |
| 67.5° | 403.1 | 296.0 | 185.0 | 162.6 | 158.6 |
| 70° | 347.6 | 244.5 | 153.3 | 140.1 | 134.8 |
| 72.5° | 294.7 | 196.9 | 128.2 | 117.6 | 115.0 |
| 75° | 243.2 | 150.7 | 105.7 | 96.5 | 95.2 |
| 77.5° | 191.6 | 107.0 | 83.3 | 78.0 | 75.3 |
| 80° | 144.1 | 76.7 | 63.4 | 58.1 | 58.1 |
| 82.5° | 100.4 | 51.5 | 43.6 | 41.0 | 41.0 |
| 85° | 56.8 | 29.1 | 25.1 | 25.1 | 25.1 |
| 87.5° | 21.1 | 10.6 | 10.6 | 9.3 | 9.3 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)