

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: P334719

Luminaire Tested: **S123IW-S1535U940-4F0-1E-UDD-1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P334719
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-9)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S123IW-S1535U940-4F0-1E-UDD-1
Description: DEFINE 3 INDIRECT LED LUMINAIRE, FLUSH SATIN WHITE DIFFUSER
WALL MOUNT, 1535 LUMENS PER FOOT
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4746.5 lumens
Efficiency: N/A
Efficacy: 155.1 lumens/watt
Spacing Criteria (0/90/45): - / - / -
Luminous Opening: Rectangular (W 0.25' x L: 4' x H: 0')
CIE Type: Indirect

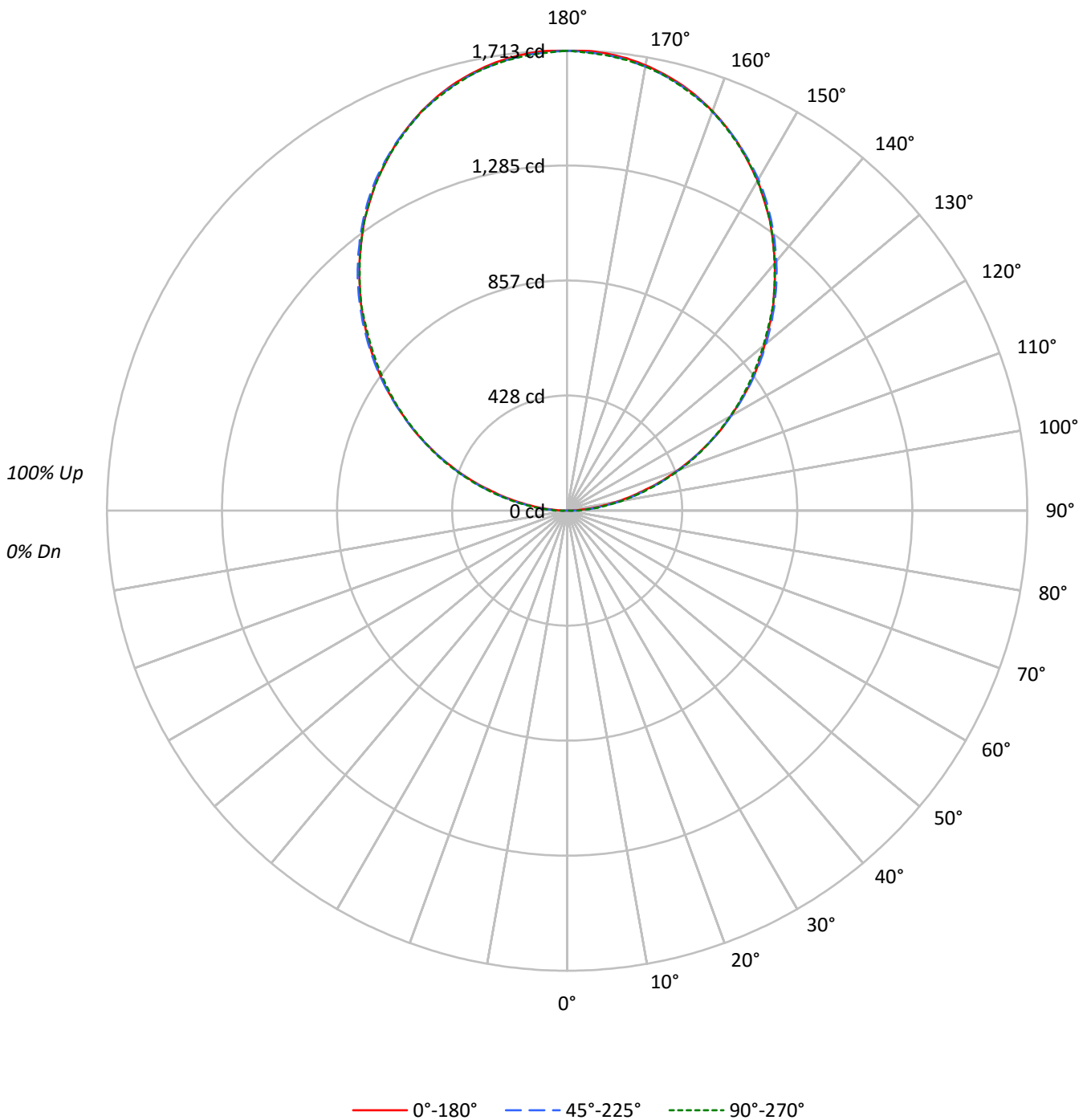
Input Watts (W): 30.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P334719

CATALOG NUMBER: S123IW-S1535U940-4F0-1E-UDD-1

Luminous Intensity Polar Plot





TEST NUMBER: P334719

CATALOG NUMBER: S123IW-S1535U940-4F0-1E-UDD-1

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 | 95 | 95 | 95 | 95 | 81 | 81 | 81 | 81 | 56 | 56 | 56 | 32 | 32 | 32 | 10 | 10 | 10 | 0 |
| 1 | 87 | 83 | 79 | 76 | 74 | 71 | 68 | 65 | 48 | 47 | 45 | 28 | 27 | 26 | 9 | 9 | 8 | 0 |
| 2 | 79 | 72 | 66 | 62 | 67 | 62 | 57 | 53 | 42 | 40 | 37 | 24 | 23 | 22 | 8 | 7 | 7 | 0 |
| 3 | 72 | 63 | 56 | 51 | 61 | 54 | 49 | 44 | 37 | 34 | 31 | 21 | 20 | 18 | 7 | 6 | 6 | 0 |
| 4 | 65 | 56 | 48 | 43 | 56 | 48 | 42 | 37 | 33 | 29 | 26 | 19 | 17 | 16 | 6 | 6 | 5 | 0 |
| 5 | 60 | 49 | 42 | 36 | 51 | 42 | 36 | 32 | 29 | 25 | 22 | 17 | 15 | 13 | 5 | 5 | 4 | 0 |
| 6 | 55 | 44 | 36 | 31 | 47 | 38 | 32 | 27 | 26 | 22 | 19 | 15 | 13 | 11 | 5 | 4 | 4 | 0 |
| 7 | 50 | 39 | 32 | 27 | 43 | 34 | 28 | 23 | 23 | 19 | 17 | 14 | 11 | 10 | 4 | 4 | 3 | 0 |
| 8 | 47 | 35 | 28 | 23 | 40 | 30 | 24 | 20 | 21 | 17 | 14 | 12 | 10 | 9 | 4 | 3 | 3 | 0 |
| 9 | 43 | 32 | 25 | 20 | 37 | 27 | 22 | 18 | 19 | 15 | 13 | 11 | 9 | 8 | 4 | 3 | 3 | 0 |
| 10 | 40 | 29 | 22 | 18 | 34 | 25 | 19 | 16 | 17 | 14 | 11 | 10 | 8 | 7 | 3 | 3 | 2 | 0 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|----|-----|-----|
| 0° | 0 | 0 | 0 |
| 5° | 0 | 0 | 0 |
| 10° | 0 | 0 | 0 |
| 15° | 0 | 0 | 0 |
| 20° | 0 | 0 | 0 |
| 25° | 0 | 0 | 0 |
| 30° | 0 | 0 | 0 |
| 35° | 0 | 0 | 0 |
| 40° | 0 | 0 | 0 |
| 45° | 0 | 0 | 0 |
| 50° | 0 | 0 | 0 |
| 55° | 0 | 0 | 0 |
| 60° | 0 | 0 | 0 |
| 65° | 0 | 0 | 0 |
| 70° | 0 | 0 | 0 |
| 75° | 0 | 0 | 0 |
| 80° | 0 | 0 | 0 |
| 85° | 0 | 0 | 0 |



TEST NUMBER: P334719

CATALOG NUMBER: S123IW-S1535U940-4F0-1E-UDD-1

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 0.0 | 0.0 |
| 10°-20° | 0.0 | 0.0 |
| 20°-30° | 0.0 | 0.0 |
| 30°-40° | 0.0 | 0.0 |
| 40°-50° | 0.0 | 0.0 |
| 50°-60° | 0.0 | 0.0 |
| 60°-70° | 0.0 | 0.0 |
| 70°-80° | 0.0 | 0.0 |
| 80°-90° | 3.6 | 0.1 |
| 90°-100° | 110.2 | 2.3 |
| 100°-110° | 333.5 | 7.0 |
| 110°-120° | 567.8 | 12.0 |
| 120°-130° | 746.9 | 15.7 |
| 130°-140° | 839.6 | 17.7 |
| 140°-150° | 825.4 | 17.4 |
| 150°-160° | 694.9 | 14.6 |
| 160°-170° | 462.6 | 9.7 |
| 170°-180° | 162.0 | 3.4 |
| 0°-30° | 0.0 | 0.0 |
| 0°-40° | 0.0 | 0.0 |
| 0°-60° | 0.0 | 0.0 |
| 0°-90° | 3.6 | 0.1 |
| 90°-120° | 1011.5 | 21.3 |
| 90°-150° | 3423.4 | 72.1 |
| 90°-180° | 4743.0 | 99.9 |
| 0°-180° | 4746.5 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|------|-------|------|-------|------|------|
| 0° | 0 | 0 | 0 | 0 | 0 | |
| 5° | 0 | 0 | 0 | 0 | 0 | 0 |
| 15° | 0 | 0 | 0 | 0 | 0 | 0 |
| 25° | 0 | 0 | 0 | 0 | 0 | 0 |
| 35° | 0 | 0 | 0 | 0 | 0 | 0 |
| 45° | 0 | 0 | 0 | 0 | 0 | 0 |
| 55° | 0 | 0 | 0 | 0 | 0 | 0 |
| 65° | 0 | 0 | 0 | 0 | 0 | 0 |
| 75° | 0 | 0 | 0 | 0 | 0 | 0 |
| 85° | 0 | 0 | 0 | 0 | 0 | 0 |
| 90° | 1 | 15 | 32 | 38 | 40 | 6 |
| 95° | 79 | 89 | 100 | 105 | 105 | 87 |
| 105° | 302 | 305 | 317 | 317 | 320 | 324 |
| 115° | 572 | 576 | 573 | 574 | 573 | 566 |
| 125° | 836 | 840 | 838 | 832 | 827 | 746 |
| 135° | 1085 | 1093 | 1092 | 1086 | 1084 | 836 |
| 145° | 1316 | 1319 | 1323 | 1322 | 1316 | 822 |
| 155° | 1507 | 1507 | 1509 | 1514 | 1505 | 694 |
| 165° | 1642 | 1638 | 1638 | 1646 | 1636 | 463 |
| 175° | 1708 | 1702 | 1702 | 1710 | 1701 | 162 |
| 180° | 1712 | 1712 | 1712 | 1712 | 1712 | |



TEST NUMBER: P334719

CATALOG NUMBER: S123IW-S1535U940-4F0-1E-UDD-1

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|-------|-------|-------|-------|-------|
| 0° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 2.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 7.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 10° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 12.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 15° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 17.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 20° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 22.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 25° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 27.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 30° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 32.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 35° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 37.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 40° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 42.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 45° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 47.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 50° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 52.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 55° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 57.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 60° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 62.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 65° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 67.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 70° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 72.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 75° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 77.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 80° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 82.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 85° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 87.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 90° | 1.3 | 14.8 | 32.3 | 37.7 | 40.3 |
| 92.5° | 40.3 | 48.4 | 56.5 | 60.5 | 57.8 |
| 95° | 79.3 | 88.7 | 99.5 | 104.9 | 104.9 |
| 97.5° | 130.4 | 137.2 | 145.2 | 151.9 | 150.6 |
| 100° | 182.9 | 190.9 | 197.7 | 201.7 | 204.4 |
| 102.5° | 243.4 | 247.4 | 256.8 | 260.9 | 259.5 |
| 105° | 302.5 | 305.2 | 317.3 | 317.3 | 320.0 |
| 107.5° | 372.5 | 373.8 | 379.2 | 383.2 | 381.9 |
| 110° | 437.0 | 439.7 | 442.4 | 447.8 | 445.1 |



TEST NUMBER: P334719

CATALOG NUMBER: S123IW-S1535U940-4F0-1E-UDD-1

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|--------|--------|--------|--------|--------|
| 112.5° | 504.2 | 505.6 | 505.6 | 512.3 | 512.3 |
| 115° | 571.5 | 575.5 | 572.8 | 574.2 | 572.8 |
| 117.5° | 640.1 | 641.4 | 638.7 | 638.7 | 634.7 |
| 120° | 703.3 | 711.3 | 704.6 | 703.3 | 700.6 |
| 122.5° | 769.1 | 774.5 | 771.8 | 767.8 | 763.8 |
| 125° | 836.4 | 840.4 | 837.7 | 832.3 | 827.0 |
| 127.5° | 898.2 | 906.3 | 903.6 | 895.5 | 890.2 |
| 130° | 960.1 | 970.8 | 966.8 | 961.4 | 952.0 |
| 132.5° | 1021.9 | 1032.7 | 1030.0 | 1023.3 | 1016.6 |
| 135° | 1085.1 | 1093.2 | 1091.9 | 1086.5 | 1083.8 |
| 137.5° | 1143.0 | 1149.7 | 1153.7 | 1147.0 | 1143.0 |
| 140° | 1203.5 | 1210.2 | 1211.5 | 1210.2 | 1200.8 |
| 142.5° | 1258.6 | 1265.3 | 1268.0 | 1266.7 | 1259.9 |
| 145° | 1316.4 | 1319.1 | 1323.1 | 1321.8 | 1316.4 |
| 147.5° | 1366.2 | 1371.5 | 1375.6 | 1375.6 | 1367.5 |
| 150° | 1418.6 | 1421.3 | 1424.0 | 1424.0 | 1415.9 |
| 152.5° | 1461.6 | 1465.7 | 1467.0 | 1469.7 | 1463.0 |
| 155° | 1507.4 | 1507.4 | 1508.7 | 1514.1 | 1504.7 |
| 157.5° | 1546.4 | 1545.0 | 1546.4 | 1551.7 | 1543.7 |
| 160° | 1582.7 | 1580.0 | 1580.0 | 1586.7 | 1581.3 |
| 162.5° | 1614.9 | 1610.9 | 1612.2 | 1619.0 | 1609.5 |
| 165° | 1641.8 | 1637.8 | 1637.8 | 1645.9 | 1636.4 |
| 167.5° | 1664.7 | 1659.3 | 1660.6 | 1668.7 | 1660.6 |
| 170° | 1683.5 | 1678.1 | 1678.1 | 1687.5 | 1678.1 |
| 172.5° | 1698.3 | 1692.9 | 1692.9 | 1701.0 | 1691.6 |
| 175° | 1707.7 | 1702.3 | 1702.3 | 1710.4 | 1701.0 |
| 177.5° | 1713.1 | 1707.7 | 1707.7 | 1715.8 | 1706.4 |
| 180° | 1711.7 | 1711.7 | 1711.7 | 1711.7 | 1711.7 |

(END OF REPORT)