

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: P334962

Luminaire Tested: **S124IW-S1050U940-4F0-1E-UDD**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P334962
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-6)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S124IW-S1050U940-4F0-1E-UDD
Description: DEFINE 4 INDIRECT LED LUMINAIRE, NO LENS
WALL MOUNT, 1050 LUMENS PER FOOT
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3740.3 lumens
Efficiency: N/A
Efficacy: 190.8 lumens/watt
Spacing Criteria (0/90/45): - / - / -
Luminous Opening: Rectangular (W 0.33' x L: 4' x H: 0')
CIE Type: Indirect

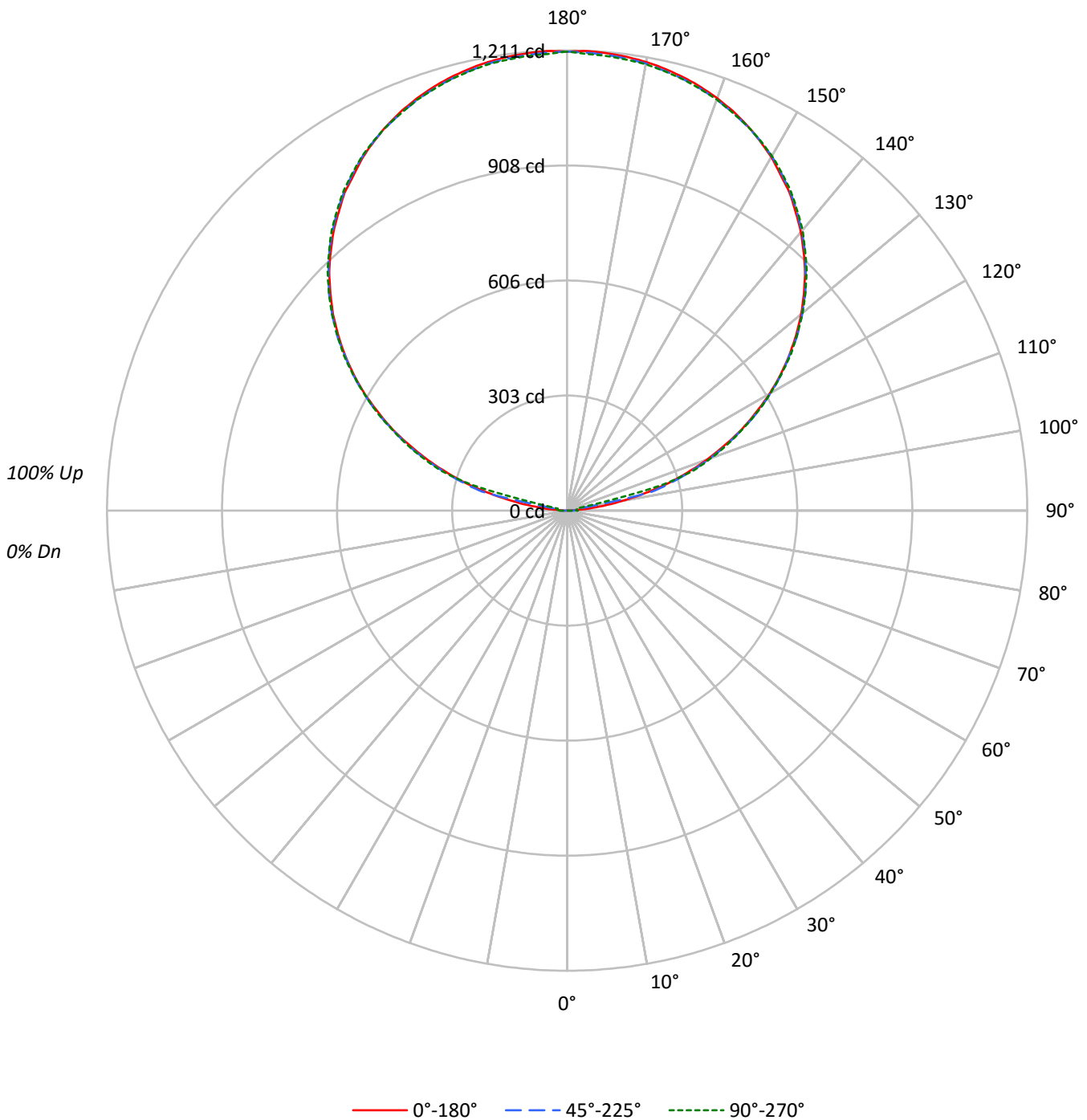
Input Watts (W): 19.6
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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 | 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 |



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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° | 2.5 | 0.1 |
| 90°-100° | 40.1 | 1.1 |
| 100°-110° | 264.1 | 7.1 |
| 110°-120° | 504.2 | 13.5 |
| 120°-130° | 640.1 | 17.1 |
| 130°-140° | 684.8 | 18.3 |
| 140°-150° | 640.3 | 17.1 |
| 150°-160° | 516.4 | 13.8 |
| 160°-170° | 333.0 | 8.9 |
| 170°-180° | 114.8 | 3.1 |
| 0°-30° | 0.0 | 0.0 |
| 0°-40° | 0.0 | 0.0 |
| 0°-60° | 0.0 | 0.0 |
| 0°-90° | 2.5 | 0.1 |
| 90°-120° | 808.4 | 21.6 |
| 90°-150° | 2773.6 | 74.2 |
| 90°-180° | 3738.0 | 99.9 |
| 0°-180° | 3740.3 | 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° | 3 | 13 | 20 | 25 | 27 | 3 |
| 95° | 50 | 19 | 20 | 25 | 26 | 61 |
| 105° | 272 | 277 | 282 | 290 | 258 | 285 |
| 115° | 508 | 510 | 510 | 511 | 511 | 500 |
| 125° | 714 | 717 | 716 | 718 | 719 | 637 |
| 135° | 885 | 884 | 888 | 890 | 892 | 682 |
| 145° | 1021 | 1024 | 1024 | 1024 | 1026 | 638 |
| 155° | 1119 | 1120 | 1118 | 1121 | 1118 | 516 |
| 165° | 1181 | 1176 | 1176 | 1184 | 1175 | 334 |
| 175° | 1208 | 1202 | 1203 | 1212 | 1201 | 115 |
| 180° | 1208 | 1208 | 1208 | 1208 | 1208 | |



TEST NUMBER: P334962

CATALOG NUMBER: S124IW-S1050U940-4F0-1E-UDD

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° | 2.7 | 12.6 | 19.9 | 25.3 | 27.1 |
| 92.5° | 13.6 | 11.7 | 19.0 | 24.4 | 24.4 |
| 95° | 49.7 | 19.0 | 19.9 | 25.3 | 26.2 |
| 97.5° | 94.9 | 114.7 | 19.9 | 24.4 | 25.3 |
| 100° | 148.2 | 164.4 | 39.8 | 24.4 | 25.3 |
| 102.5° | 207.8 | 218.6 | 229.5 | 26.2 | 26.2 |
| 105° | 271.9 | 277.4 | 281.9 | 290.0 | 257.5 |
| 107.5° | 330.7 | 333.4 | 339.7 | 344.2 | 347.8 |
| 110° | 390.3 | 393.0 | 398.4 | 400.2 | 402.9 |



TEST NUMBER: P334962

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CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|--------|--------|--------|--------|--------|
| 112.5° | 448.1 | 453.5 | 455.3 | 454.4 | 458.1 |
| 115° | 507.7 | 510.5 | 509.6 | 511.4 | 511.4 |
| 117.5° | 561.0 | 564.7 | 567.4 | 566.5 | 566.5 |
| 120° | 615.3 | 618.9 | 618.0 | 619.8 | 618.0 |
| 122.5° | 665.9 | 667.7 | 669.5 | 670.4 | 668.6 |
| 125° | 713.7 | 717.3 | 715.5 | 718.3 | 719.2 |
| 127.5° | 759.8 | 760.7 | 765.2 | 764.3 | 763.4 |
| 130° | 804.1 | 805.0 | 807.7 | 808.6 | 808.6 |
| 132.5° | 844.7 | 846.5 | 850.2 | 851.1 | 850.2 |
| 135° | 885.4 | 884.5 | 888.1 | 889.9 | 891.7 |
| 137.5° | 921.5 | 921.5 | 926.0 | 927.9 | 927.0 |
| 140° | 956.8 | 958.6 | 960.4 | 963.1 | 964.0 |
| 142.5° | 988.4 | 992.0 | 992.9 | 994.7 | 994.7 |
| 145° | 1020.9 | 1023.6 | 1023.6 | 1024.5 | 1026.3 |
| 147.5° | 1046.2 | 1051.6 | 1050.7 | 1051.6 | 1052.5 |
| 150° | 1074.2 | 1077.8 | 1076.9 | 1076.9 | 1077.8 |
| 152.5° | 1097.7 | 1100.4 | 1098.6 | 1100.4 | 1099.5 |
| 155° | 1119.4 | 1120.3 | 1117.6 | 1121.2 | 1118.5 |
| 157.5° | 1138.4 | 1138.4 | 1134.7 | 1139.3 | 1134.7 |
| 160° | 1154.6 | 1151.9 | 1151.0 | 1156.4 | 1151.0 |
| 162.5° | 1169.1 | 1165.5 | 1164.6 | 1170.0 | 1163.7 |
| 165° | 1180.8 | 1176.3 | 1176.3 | 1183.5 | 1175.4 |
| 167.5° | 1190.8 | 1186.2 | 1185.3 | 1193.5 | 1184.4 |
| 170° | 1198.9 | 1193.5 | 1194.4 | 1201.6 | 1192.6 |
| 172.5° | 1204.3 | 1198.9 | 1199.8 | 1207.0 | 1197.1 |
| 175° | 1207.9 | 1202.5 | 1203.4 | 1211.5 | 1200.7 |
| 177.5° | 1210.6 | 1204.3 | 1206.1 | 1213.3 | 1202.5 |
| 180° | 1207.9 | 1207.9 | 1207.9 | 1207.9 | 1207.9 |

(END OF REPORT)