

Signify Classified - Internal
Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: NEO-RAY

Report Number: P645258

Luminaire Tested: OMN4DP-SR4F0-75D830-FLL-1DUDD-WW

Issue Date: 2/16/2023



Test Information

Test Method: LM-79-2019
Report Number: P645258
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2206-689-19)
Test Lab: INNOVATION CENTER
Issue Date: 2/16/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: OMN4DP-SR4F0-75D830-FLL-1DUDD-WW
Description: NEO-RAY CIRQUE SUSPENDED LED LUMINAIRE
DOWNLIGHT - FLAT FROSTED LENS - 750 LUMENS PER FOOT
DIRECT ONLY
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

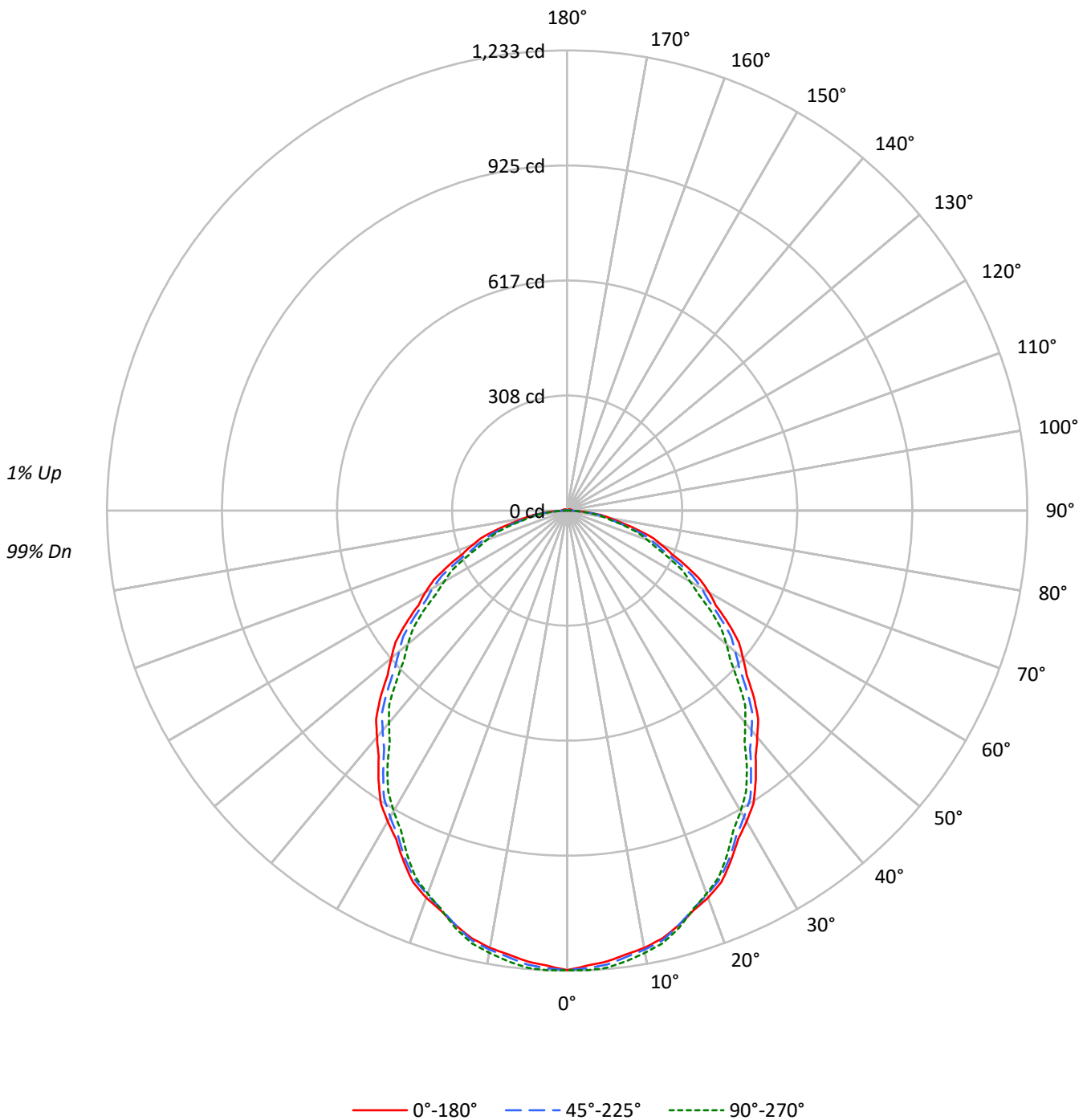
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3003.6 lumens
Efficiency: N/A
Efficacy: 137.8 lumens/watt
Spacing Criteria (0/90/45): 1.17 / 1.13 / 1.26
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 21.8
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: 24 FT

TEST NUMBER: P645258
CATALOG NUMBER: OMN4DP-SR4F0-75D830-FLL-1DUDD-WW

Luminous Intensity Polar Plot





TEST NUMBER: P645258

CATALOG NUMBER: OMN4DP-SR4F0-75D830-FLL-1DUDD-WW

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|----|----|----|----|----|---|--|--|--|----|--|--|--|--|--|--|--|--|----|---|
| RF | 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 | 99 | | | | | | | | | | | | | | | | | | | | |
| 1 | 109 | 104 | 100 | 96 | 106 | 102 | 98 | 95 | 98 | 95 | 92 | 94 | 91 | 89 | 90 | 88 | 86 | 84 | | | | | | | | | | | | | | | | | | | | |
| 2 | 99 | 91 | 85 | 79 | 97 | 90 | 83 | 78 | 86 | 81 | 76 | 83 | 78 | 75 | 80 | 76 | 73 | 71 | | | | | | | | | | | | | | | | | | | | |
| 3 | 91 | 81 | 73 | 67 | 89 | 79 | 72 | 66 | 76 | 70 | 65 | 73 | 68 | 63 | 71 | 66 | 62 | 60 | | | | | | | | | | | | | | | | | | | | |
| 4 | 84 | 72 | 63 | 57 | 81 | 71 | 63 | 56 | 68 | 61 | 56 | 66 | 60 | 55 | 63 | 58 | 54 | 52 | | | | | | | | | | | | | | | | | | | | |
| 5 | 77 | 65 | 56 | 49 | 75 | 63 | 55 | 49 | 61 | 54 | 48 | 59 | 53 | 48 | 57 | 52 | 47 | 45 | | | | | | | | | | | | | | | | | | | | |
| 6 | 71 | 58 | 50 | 43 | 69 | 57 | 49 | 43 | 55 | 48 | 43 | 54 | 47 | 42 | 52 | 46 | 42 | 40 | | | | | | | | | | | | | | | | | | | | |
| 7 | 66 | 53 | 44 | 38 | 65 | 52 | 44 | 38 | 51 | 43 | 38 | 49 | 43 | 38 | 48 | 42 | 37 | 35 | | | | | | | | | | | | | | | | | | | | |
| 8 | 62 | 49 | 40 | 34 | 60 | 48 | 40 | 34 | 46 | 39 | 34 | 45 | 39 | 34 | 44 | 38 | 34 | 32 | | | | | | | | | | | | | | | | | | | | |
| 9 | 58 | 45 | 37 | 31 | 56 | 44 | 36 | 31 | 43 | 36 | 31 | 42 | 35 | 31 | 41 | 35 | 31 | 29 | | | | | | | | | | | | | | | | | | | | |
| 10 | 54 | 41 | 34 | 28 | 53 | 41 | 33 | 28 | 40 | 33 | 28 | 39 | 32 | 28 | 38 | 32 | 28 | 26 | | | | | | | | | | | | | | | | | | | | |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|-------|-------|-------|
| 0° | 19882 | 19882 | 19882 |
| 5° | 19658 | 19794 | 19930 |
| 10° | 19502 | 19584 | 19721 |
| 15° | 19239 | 19239 | 19351 |
| 20° | 18969 | 18826 | 18768 |
| 25° | 18474 | 18326 | 18088 |
| 30° | 17928 | 17678 | 17335 |
| 35° | 17369 | 16939 | 16543 |
| 40° | 16701 | 16208 | 15643 |
| 45° | 16143 | 15531 | 14767 |
| 50° | 15443 | 14770 | 14014 |
| 55° | 14854 | 14100 | 13253 |
| 60° | 14173 | 13417 | 12281 |
| 65° | 13440 | 12481 | 11522 |
| 70° | 12732 | 11547 | 10754 |
| 75° | 11915 | 10555 | 10031 |
| 80° | 10907 | 9661 | 9186 |
| 85° | 10244 | 9003 | 8373 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 16143 cd/sqm



TEST NUMBER: P645258

CATALOG NUMBER: OMN4DP-SR4F0-75D830-FLL-1DUDD-WW

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 115.8 | 3.9 |
| 10°-20° | 325.1 | 10.8 |
| 20°-30° | 472.6 | 15.7 |
| 30°-40° | 537.6 | 17.9 |
| 40°-50° | 524.2 | 17.5 |
| 50°-60° | 447.4 | 14.9 |
| 60°-70° | 325.2 | 10.8 |
| 70°-80° | 183.9 | 6.1 |
| 80°-90° | 56.6 | 1.9 |
| 90°-100° | 7.2 | 0.2 |
| 100°-110° | 4.0 | 0.1 |
| 110°-120° | 2.4 | 0.1 |
| 120°-130° | 1.4 | 0.0 |
| 130°-140° | 0.1 | 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° | 913.5 | 30.4 |
| 0°-40° | 1451.1 | 48.3 |
| 0°-60° | 2422.8 | 80.7 |
| 0°-90° | 2988.4 | 99.5 |
| 90°-120° | 13.6 | 0.5 |
| 90°-150° | 15.2 | 0.5 |
| 90°-180° | 15.0 | 0.5 |
| 0°-180° | 3003.6 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|------|-------|------|-------|------|------|
| 0° | 1231 | 1231 | 1231 | 1231 | 1231 | |
| 5° | 1213 | 1231 | 1221 | 1220 | 1230 | 115 |
| 15° | 1151 | 1166 | 1151 | 1150 | 1158 | 324 |
| 25° | 1037 | 1047 | 1029 | 1010 | 1015 | 477 |
| 35° | 881 | 884 | 859 | 839 | 839 | 550 |
| 45° | 707 | 704 | 680 | 656 | 647 | 544 |
| 55° | 528 | 526 | 501 | 477 | 471 | 471 |
| 65° | 352 | 348 | 327 | 306 | 302 | 349 |
| 75° | 191 | 184 | 169 | 162 | 161 | 203 |
| 85° | 55 | 49 | 49 | 47 | 45 | 59 |
| 90° | 7 | 8 | 10 | 8 | 8 | 7 |
| 95° | 13 | 7 | 5 | 5 | 3 | 10 |
| 105° | 8 | 5 | 3 | 2 | 0 | 10 |
| 115° | 5 | 3 | 2 | 0 | 0 | 6 |
| 125° | 3 | 3 | 2 | 0 | 0 | 3 |
| 135° | 0 | 0 | 0 | 0 | 0 | 0 |
| 145° | 0 | 0 | 0 | 0 | 0 | 0 |
| 155° | 0 | 0 | 0 | 0 | 0 | 0 |
| 165° | 0 | 0 | 0 | 0 | 0 | 0 |
| 175° | 0 | 0 | 0 | 0 | 0 | 0 |
| 180° | 0 | 0 | 0 | 0 | 0 | 0 |



TEST NUMBER: P645258

CATALOG NUMBER: OMN4DP-SR4F0-75D830-FLL-1DUDD-WW

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|--------|--------|--------|--------|--------|
| 0° | 1231.4 | 1231.4 | 1231.4 | 1231.4 | 1231.4 |
| 2.5° | 1220.6 | 1236.4 | 1227.3 | 1227.5 | 1232.7 |
| 5° | 1212.9 | 1231.0 | 1221.3 | 1219.9 | 1229.7 |
| 7.5° | 1200.2 | 1217.9 | 1206.6 | 1204.9 | 1217.6 |
| 10° | 1189.5 | 1205.9 | 1194.5 | 1191.4 | 1202.9 |
| 12.5° | 1174.7 | 1191.1 | 1179.8 | 1175.3 | 1186.8 |
| 15° | 1151.0 | 1165.7 | 1151.0 | 1149.5 | 1157.7 |
| 17.5° | 1124.1 | 1136.9 | 1119.8 | 1114.2 | 1120.5 |
| 20° | 1104.0 | 1115.5 | 1095.7 | 1087.4 | 1092.3 |
| 22.5° | 1078.6 | 1090.0 | 1068.9 | 1056.6 | 1062.8 |
| 25° | 1037.0 | 1046.9 | 1028.7 | 1010.3 | 1015.3 |
| 27.5° | 992.5 | 1000.0 | 981.7 | 963.0 | 964.7 |
| 30° | 961.6 | 966.6 | 948.2 | 928.2 | 929.8 |
| 32.5° | 929.5 | 933.1 | 913.4 | 892.0 | 892.3 |
| 35° | 881.2 | 884.5 | 859.4 | 839.3 | 839.3 |
| 37.5° | 830.0 | 831.9 | 805.2 | 783.3 | 781.0 |
| 40° | 792.4 | 795.7 | 769.0 | 747.1 | 742.2 |
| 42.5° | 757.6 | 758.2 | 734.1 | 712.2 | 706.0 |
| 45° | 707.0 | 703.7 | 680.2 | 656.5 | 646.7 |
| 47.5° | 652.4 | 652.4 | 625.6 | 601.9 | 592.7 |
| 50° | 614.8 | 614.8 | 588.0 | 564.4 | 557.9 |
| 52.5° | 580.0 | 578.7 | 553.2 | 529.5 | 520.4 |
| 55° | 527.7 | 526.1 | 500.9 | 477.3 | 470.8 |
| 57.5° | 472.4 | 472.4 | 449.0 | 423.7 | 416.5 |
| 60° | 438.9 | 438.9 | 415.5 | 390.1 | 380.3 |
| 62.5° | 402.8 | 401.4 | 378.0 | 355.4 | 349.5 |
| 65° | 351.8 | 348.5 | 326.7 | 306.5 | 301.6 |
| 67.5° | 303.2 | 300.0 | 276.8 | 260.6 | 257.3 |
| 70° | 269.7 | 266.5 | 244.6 | 231.1 | 227.8 |
| 72.5° | 237.6 | 233.0 | 213.8 | 203.0 | 199.7 |
| 75° | 191.0 | 184.4 | 169.2 | 162.5 | 160.8 |
| 77.5° | 146.8 | 135.6 | 129.3 | 124.6 | 123.0 |
| 80° | 117.3 | 107.4 | 103.9 | 100.5 | 98.8 |
| 82.5° | 91.8 | 82.0 | 81.1 | 79.0 | 77.4 |
| 85° | 55.3 | 48.7 | 48.6 | 46.9 | 45.2 |
| 87.5° | 24.1 | 20.5 | 20.8 | 20.4 | 20.4 |
| 90° | 6.7 | 8.3 | 10.1 | 8.4 | 8.4 |
| 92.5° | 12.1 | 8.5 | 7.4 | 7.0 | 5.7 |
| 95° | 13.4 | 6.9 | 5.0 | 5.0 | 3.4 |
| 97.5° | 11.7 | 6.8 | 4.7 | 3.0 | 1.7 |
| 100° | 11.7 | 6.8 | 3.4 | 1.7 | 1.7 |
| 102.5° | 10.4 | 5.5 | 3.4 | 1.6 | 0.3 |
| 105° | 8.4 | 5.1 | 3.4 | 1.6 | 0.0 |
| 107.5° | 8.0 | 5.1 | 3.4 | 1.6 | 0.0 |
| 110° | 6.7 | 5.1 | 3.4 | 1.6 | 0.0 |



TEST NUMBER: P645258

CATALOG NUMBER: OMN4DP-SR4F0-75D830-FLL-1DUDD-WW

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|-----|-------|-----|-------|-----|
| 112.5° | 6.7 | 5.1 | 3.4 | 1.6 | 0.0 |
| 115° | 5.0 | 3.4 | 1.7 | 0.0 | 0.0 |
| 117.5° | 5.0 | 3.4 | 1.7 | 0.0 | 0.0 |
| 120° | 5.0 | 3.4 | 1.7 | 0.0 | 0.0 |
| 122.5° | 3.7 | 3.4 | 1.7 | 0.0 | 0.0 |
| 125° | 3.4 | 3.4 | 1.7 | 0.0 | 0.0 |
| 127.5° | 1.7 | 3.0 | 1.7 | 0.0 | 0.0 |
| 130° | 1.7 | 1.7 | 1.7 | 0.0 | 0.0 |
| 132.5° | 0.3 | 0.3 | 0.3 | 0.0 | 0.0 |
| 135° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 137.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 140° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 142.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 145° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 147.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 150° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 152.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 155° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 157.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 160° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 162.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 165° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 167.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 170° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 172.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 175° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 177.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 180° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)