

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: P534495

Luminaire Tested: **S920DIP-W340-XX4XX-UDD-W-PC**

Issue Date: 6/9/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P534495  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29792)  
Test Lab: INNOVATION CENTER  
Issue Date: 6/9/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: NEO-RAY  
Catalog Number: S920DIP-W340-XX4XX-UDD-W-PC  
Description: NEO-RAY CONVERGE SUSPENDED LED WaveStream LUMINAIRE  
WHITE RECTANCULAR HOUSING WITH PERFORATED UPLIGHT COVER  
Light Source: 4000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

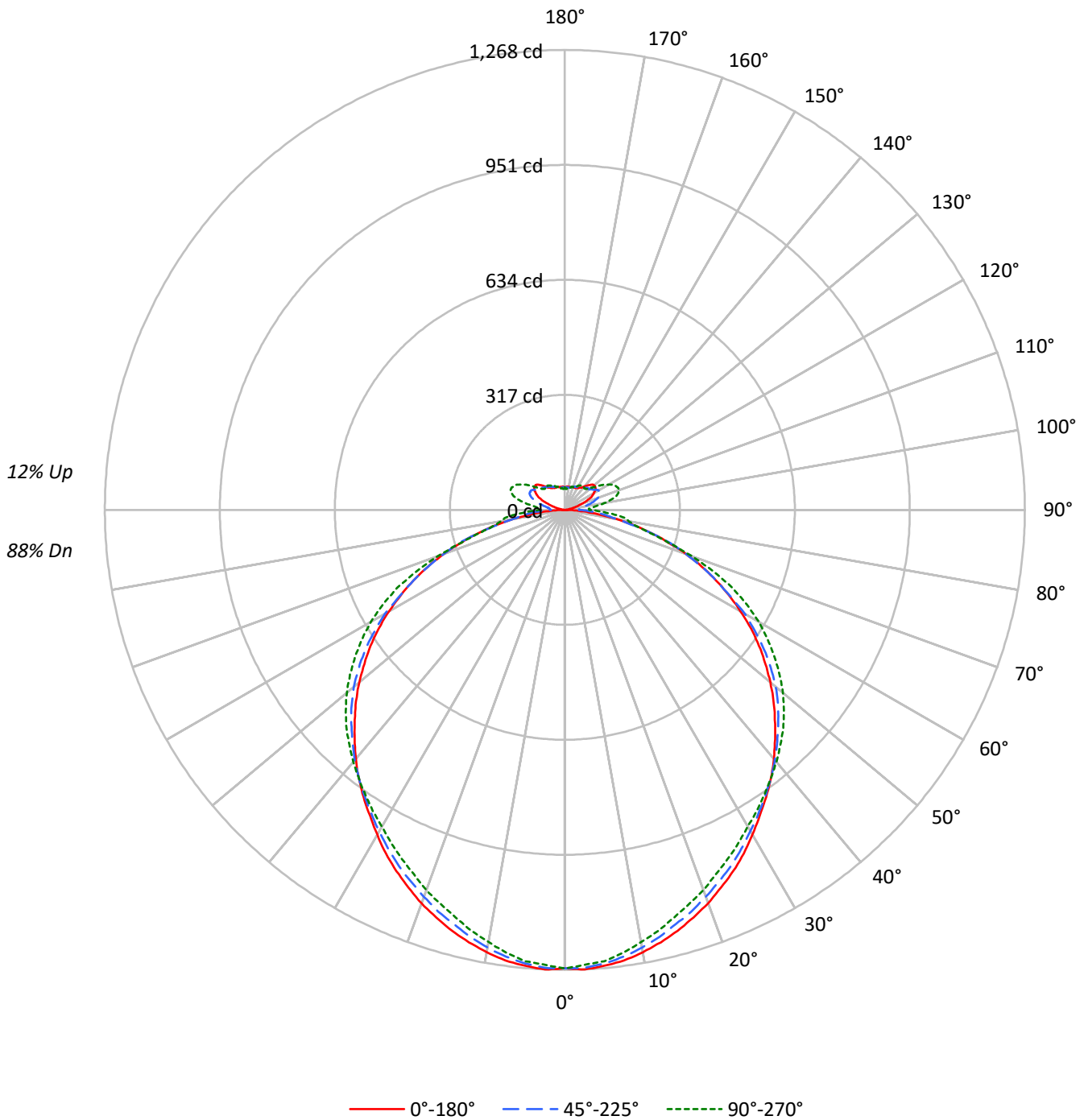
Lumens per Lamp: N/A  
Luminaire Lumens: 4134.1 lumens  
Efficiency: N/A  
Efficacy: 107.4 lumens/watt  
Spacing Criteria (0/90/45): 1.22 / 1.2 / 1.36  
Luminous Opening: Rectangular w/ Sides (W: 0.68' x L: 4' x H: 0.31')  
CIE Type: Semi-Direct

Input Watts (W): 38.5  
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: 24 FT



TEST NUMBER: P534495  
CATALOG NUMBER: S920DIP-W340-XX4XX-UDD-W-PC

### Luminous Intensity Polar Plot





TEST NUMBER: P534495

CATALOG NUMBER: S920DIP-W340-XX4XX-UDD-W-PC

**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 | 0  |   |
| RCR |     |     |     |     |     |     |     |     |     |     |     |    |    |    |    |    |    |    |    |    |    |   |
| 0   | 116 | 116 | 116 | 116 | 112 | 112 | 112 | 112 | 104 | 104 | 104 | 97 | 97 | 97 | 91 | 91 | 91 | 88 |    |    |    |   |
| 1   | 106 | 101 | 96  | 92  | 102 | 97  | 93  | 90  | 91  | 88  | 85  | 85 | 82 | 80 | 79 | 77 | 75 | 73 |    |    |    |   |
| 2   | 96  | 87  | 81  | 75  | 92  | 85  | 78  | 73  | 79  | 74  | 69  | 74 | 70 | 66 | 69 | 66 | 63 | 60 |    |    |    |   |
| 3   | 87  | 77  | 68  | 62  | 84  | 74  | 67  | 61  | 69  | 63  | 58  | 65 | 60 | 55 | 61 | 57 | 53 | 50 |    |    |    |   |
| 4   | 80  | 68  | 59  | 52  | 76  | 66  | 57  | 51  | 61  | 55  | 49  | 58 | 52 | 47 | 54 | 49 | 45 | 43 |    |    |    |   |
| 5   | 73  | 60  | 51  | 45  | 70  | 58  | 50  | 44  | 55  | 48  | 42  | 52 | 46 | 41 | 49 | 43 | 39 | 37 |    |    |    |   |
| 6   | 67  | 54  | 45  | 39  | 65  | 53  | 44  | 38  | 50  | 42  | 37  | 47 | 40 | 36 | 44 | 39 | 34 | 32 |    |    |    |   |
| 7   | 62  | 49  | 40  | 34  | 60  | 48  | 39  | 34  | 45  | 38  | 33  | 42 | 36 | 31 | 40 | 35 | 30 | 28 |    |    |    |   |
| 8   | 58  | 45  | 36  | 30  | 56  | 43  | 35  | 30  | 41  | 34  | 29  | 39 | 33 | 28 | 37 | 31 | 27 | 25 |    |    |    |   |
| 9   | 54  | 41  | 33  | 27  | 52  | 40  | 32  | 27  | 38  | 31  | 26  | 36 | 30 | 25 | 34 | 29 | 25 | 23 |    |    |    |   |
| 10  | 51  | 38  | 30  | 25  | 49  | 37  | 29  | 24  | 35  | 28  | 24  | 33 | 27 | 23 | 31 | 26 | 22 | 20 |    |    |    |   |

**AVERAGE LUMINANCE (cd/sqm):**

|     | 0°   | 45°  | 90°  |
|-----|------|------|------|
| 0°  | 5021 | 5021 | 5021 |
| 5°  | 4998 | 4846 | 4790 |
| 10° | 4927 | 4635 | 4519 |
| 15° | 4842 | 4417 | 4263 |
| 20° | 4747 | 4220 | 4046 |
| 25° | 4648 | 4040 | 3839 |
| 30° | 4541 | 3856 | 3662 |
| 35° | 4451 | 3696 | 3526 |
| 40° | 4366 | 3550 | 3404 |
| 45° | 4272 | 3396 | 3286 |
| 50° | 4185 | 3237 | 3144 |
| 55° | 4077 | 3021 | 2960 |
| 60° | 3918 | 2750 | 2741 |
| 65° | 3711 | 2393 | 2423 |
| 70° | 3399 | 2025 | 1908 |
| 75° | 2946 | 1564 | 1357 |
| 80° | 2258 | 1036 | 1140 |
| 85° | 1250 | 813  | 963  |



TEST NUMBER: P534495  
 CATALOG NUMBER: S920DIP-W340-XX4XX-UDD-W-PC

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 118.7  | 2.9       |
| 10°-20°   | 333.3  | 8.1       |
| 20°-30°   | 497.8  | 12.0      |
| 30°-40°   | 602.7  | 14.6      |
| 40°-50°   | 642.5  | 15.5      |
| 50°-60°   | 601.4  | 14.5      |
| 60°-70°   | 468.1  | 11.3      |
| 70°-80°   | 260.7  | 6.3       |
| 80°-90°   | 100.6  | 2.4       |
| 90°-100°  | 48.8   | 1.2       |
| 100°-110° | 87.1   | 2.1       |
| 110°-120° | 107.1  | 2.6       |
| 120°-130° | 92.5   | 2.2       |
| 130°-140° | 67.2   | 1.6       |
| 140°-150° | 48.9   | 1.2       |
| 150°-160° | 32.5   | 0.8       |
| 160°-170° | 18.4   | 0.4       |
| 170°-180° | 5.9    | 0.1       |
| 0°-30°    | 949.8  | 23.0      |
| 0°-40°    | 1552.5 | 37.6      |
| 0°-60°    | 2796.4 | 67.6      |
| 0°-90°    | 3625.7 | 87.7      |
| 90°-120°  | 243.0  | 5.9       |
| 90°-150°  | 451.6  | 10.9      |
| 90°-180°  | 508.0  | 12.3      |
| 0°-180°   | 4134.1 | 100.0     |

**CANDELA DISTRIBUTION:**

|      | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|------|------|-------|------|-------|------|------|
| 0°   | 1264 | 1264  | 1264 | 1264  | 1264 |      |
| 5°   | 1262 | 1253  | 1256 | 1251  | 1249 | 120  |
| 15°  | 1202 | 1189  | 1182 | 1170  | 1163 | 339  |
| 25°  | 1099 | 1090  | 1084 | 1066  | 1062 | 506  |
| 35°  | 967  | 965   | 963  | 959   | 959  | 605  |
| 45°  | 819  | 819   | 832  | 845   | 851  | 632  |
| 55°  | 654  | 654   | 671  | 690   | 705  | 583  |
| 65°  | 460  | 458   | 460  | 497   | 510  | 454  |
| 75°  | 247  | 241   | 245  | 241   | 239  | 260  |
| 85°  | 52   | 60    | 95   | 120   | 131  | 61   |
| 90°  | 0    | 19    | 39   | 56    | 67   | 3    |
| 95°  | 4    | 24    | 43   | 62    | 77   | 5    |
| 105° | 30   | 47    | 77   | 122   | 146  | 33   |
| 115° | 77   | 77    | 108  | 138   | 155  | 74   |
| 125° | 103  | 97    | 97   | 110   | 116  | 91   |
| 135° | 97   | 88    | 86   | 82    | 82   | 75   |
| 145° | 75   | 75    | 77   | 82    | 82   | 47   |
| 155° | 67   | 67    | 71   | 73    | 71   | 31   |
| 165° | 64   | 64    | 64   | 64    | 64   | 19   |
| 175° | 64   | 62    | 62   | 62    | 58   | 6    |
| 180° | 62   | 62    | 62   | 62    | 62   |      |



TEST NUMBER: P534495

CATALOG NUMBER: S920DIP-W340-XX4XX-UDD-W-PC

**CANDELA DISTRIBUTION (FULL):**

|        | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|--------|--------|--------|--------|--------|--------|
| 0°     | 1264.1 | 1264.1 | 1264.1 | 1264.1 | 1264.1 |
| 2.5°   | 1268.4 | 1259.8 | 1264.1 | 1262.0 | 1255.5 |
| 5°     | 1262.0 | 1253.4 | 1255.5 | 1251.2 | 1249.1 |
| 7.5°   | 1253.4 | 1242.6 | 1242.6 | 1236.2 | 1231.9 |
| 10°    | 1238.3 | 1227.6 | 1225.4 | 1214.7 | 1210.4 |
| 12.5°  | 1221.1 | 1210.4 | 1206.1 | 1193.2 | 1188.9 |
| 15°    | 1201.8 | 1188.9 | 1182.4 | 1169.5 | 1163.1 |
| 17.5°  | 1178.1 | 1167.4 | 1160.9 | 1145.9 | 1139.4 |
| 20°    | 1154.5 | 1143.7 | 1135.1 | 1120.1 | 1115.8 |
| 22.5°  | 1126.5 | 1115.8 | 1109.3 | 1092.1 | 1087.8 |
| 25°    | 1098.6 | 1090.0 | 1083.5 | 1066.3 | 1062.0 |
| 27.5°  | 1068.5 | 1059.9 | 1053.4 | 1040.5 | 1036.2 |
| 30°    | 1034.1 | 1029.8 | 1023.3 | 1010.4 | 1008.3 |
| 32.5°  | 999.7  | 997.5  | 993.2  | 984.6  | 984.6  |
| 35°    | 967.4  | 965.3  | 963.1  | 958.8  | 958.8  |
| 37.5°  | 933.0  | 930.9  | 933.0  | 930.9  | 933.0  |
| 40°    | 896.5  | 894.3  | 900.8  | 902.9  | 907.2  |
| 42.5°  | 857.8  | 857.8  | 866.4  | 875.0  | 879.3  |
| 45°    | 819.1  | 819.1  | 832.0  | 844.9  | 851.3  |
| 47.5°  | 780.4  | 780.4  | 797.6  | 810.5  | 819.1  |
| 50°    | 739.5  | 739.5  | 758.9  | 773.9  | 784.7  |
| 52.5°  | 696.6  | 696.6  | 715.9  | 735.2  | 746.0  |
| 55°    | 653.6  | 653.6  | 670.8  | 690.1  | 705.2  |
| 57.5°  | 608.4  | 608.4  | 621.3  | 647.1  | 662.2  |
| 60°    | 559.0  | 561.1  | 571.9  | 599.8  | 617.0  |
| 62.5°  | 509.5  | 509.5  | 511.7  | 550.4  | 565.4  |
| 65°    | 460.1  | 457.9  | 460.1  | 496.6  | 509.5  |
| 67.5°  | 408.5  | 404.2  | 406.3  | 442.9  | 442.9  |
| 70°    | 354.7  | 348.3  | 354.7  | 374.1  | 369.8  |
| 72.5°  | 298.8  | 292.4  | 305.3  | 303.1  | 298.8  |
| 75°    | 247.2  | 240.8  | 245.1  | 240.8  | 238.6  |
| 77.5°  | 193.5  | 189.2  | 187.0  | 189.2  | 195.6  |
| 80°    | 141.9  | 144.0  | 141.9  | 165.5  | 178.4  |
| 82.5°  | 92.4   | 96.7   | 113.9  | 150.5  | 165.5  |
| 85°    | 51.6   | 60.2   | 94.6   | 120.4  | 131.1  |
| 87.5°  | 19.3   | 38.7   | 62.3   | 83.8   | 94.6   |
| 90°    | 0.0    | 19.3   | 38.7   | 55.9   | 66.6   |
| 92.5°  | 2.1    | 19.3   | 40.8   | 55.9   | 66.6   |
| 95°    | 4.3    | 23.6   | 43.0   | 62.3   | 77.4   |
| 97.5°  | 6.4    | 27.9   | 47.3   | 75.2   | 92.4   |
| 100°   | 12.9   | 32.2   | 55.9   | 92.4   | 113.9  |
| 102.5° | 21.5   | 38.7   | 66.6   | 109.6  | 131.1  |
| 105°   | 30.1   | 47.3   | 77.4   | 122.5  | 146.2  |
| 107.5° | 40.8   | 53.7   | 88.1   | 131.1  | 154.8  |
| 110°   | 53.7   | 62.3   | 96.7   | 135.4  | 159.1  |



TEST NUMBER: P534495

CATALOG NUMBER: S920DIP-W340-XX4XX-UDD-W-PC

**CANDELA DISTRIBUTION (continued):**

|        | 0°    | 22.5° | 45°   | 67.5° | 90°   |
|--------|-------|-------|-------|-------|-------|
| 112.5° | 64.5  | 68.8  | 103.2 | 137.6 | 159.1 |
| 115°   | 77.4  | 77.4  | 107.5 | 137.6 | 154.8 |
| 117.5° | 86.0  | 83.8  | 107.5 | 135.4 | 150.5 |
| 120°   | 92.4  | 90.3  | 107.5 | 131.1 | 139.7 |
| 122.5° | 98.9  | 94.6  | 103.2 | 120.4 | 129.0 |
| 125°   | 103.2 | 96.7  | 96.7  | 109.6 | 116.1 |
| 127.5° | 105.3 | 96.7  | 92.4  | 98.9  | 103.2 |
| 130°   | 105.3 | 96.7  | 88.1  | 88.1  | 94.6  |
| 132.5° | 103.2 | 92.4  | 88.1  | 81.7  | 86.0  |
| 135°   | 96.7  | 88.1  | 86.0  | 81.7  | 81.7  |
| 137.5° | 90.3  | 83.8  | 83.8  | 81.7  | 79.5  |
| 140°   | 83.8  | 81.7  | 81.7  | 81.7  | 81.7  |
| 142.5° | 77.4  | 77.4  | 79.5  | 81.7  | 81.7  |
| 145°   | 75.2  | 75.2  | 77.4  | 81.7  | 81.7  |
| 147.5° | 70.9  | 70.9  | 75.2  | 79.5  | 79.5  |
| 150°   | 68.8  | 70.9  | 73.1  | 77.4  | 77.4  |
| 152.5° | 68.8  | 68.8  | 70.9  | 75.2  | 73.1  |
| 155°   | 66.6  | 66.6  | 70.9  | 73.1  | 70.9  |
| 157.5° | 66.6  | 66.6  | 68.8  | 70.9  | 70.9  |
| 160°   | 66.6  | 64.5  | 66.6  | 68.8  | 66.6  |
| 162.5° | 66.6  | 64.5  | 66.6  | 66.6  | 66.6  |
| 165°   | 64.5  | 64.5  | 64.5  | 64.5  | 64.5  |
| 167.5° | 64.5  | 64.5  | 62.3  | 64.5  | 62.3  |
| 170°   | 64.5  | 62.3  | 62.3  | 62.3  | 60.2  |
| 172.5° | 64.5  | 62.3  | 62.3  | 62.3  | 60.2  |
| 175°   | 64.5  | 62.3  | 62.3  | 62.3  | 58.0  |
| 177.5° | 62.3  | 62.3  | 62.3  | 62.3  | 58.0  |
| 180°   | 62.3  | 62.3  | 62.3  | 62.3  | 62.3  |

(END OF REPORT)