

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: P334696

Luminaire Tested: **S123IW-S755U840-4F0-1E-UDD-1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P334696
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-S755U840-4F0-1E-UDD-1
Description: DEFINE 3 INDIRECT LED LUMINAIRE, FLUSH SATIN WHITE DIFFUSER
WALL MOUNT, 755 LUMENS PER FOOT
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2645.9 lumens
Efficiency: N/A
Efficacy: 189.0 lumens/watt
Spacing Criteria (0/90/45): - / - / -
Luminous Opening: Rectangular (W 0.25' x L: 4' x H: 0')
CIE Type: Indirect

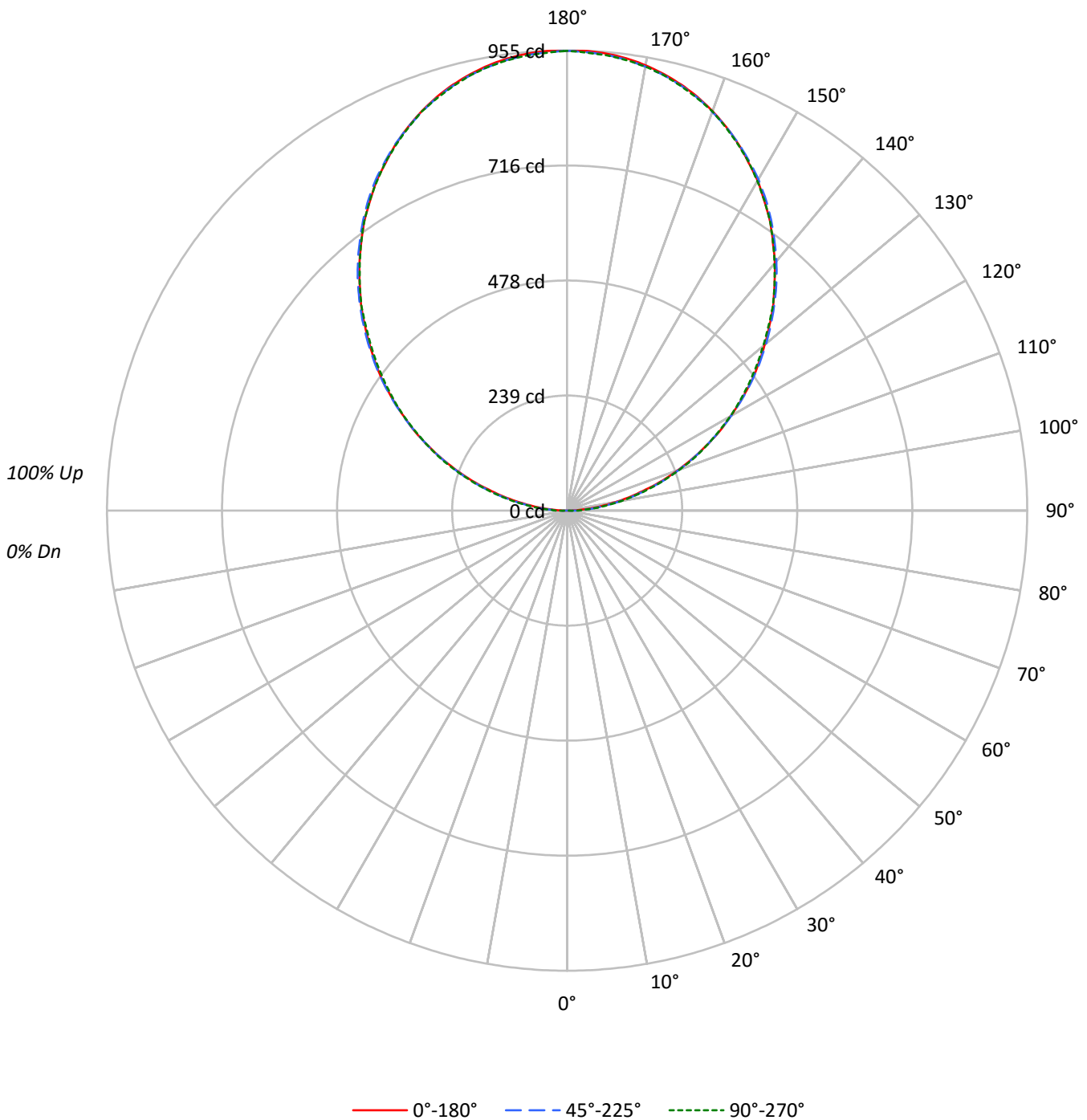
Input Watts (W): 14
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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° | 2.0 | 0.1 |
| 90°-100° | 61.4 | 2.3 |
| 100°-110° | 185.9 | 7.0 |
| 110°-120° | 316.5 | 12.0 |
| 120°-130° | 416.4 | 15.7 |
| 130°-140° | 468.0 | 17.7 |
| 140°-150° | 460.1 | 17.4 |
| 150°-160° | 387.4 | 14.6 |
| 160°-170° | 257.9 | 9.7 |
| 170°-180° | 90.3 | 3.4 |
| 0°-30° | 0.0 | 0.0 |
| 0°-40° | 0.0 | 0.0 |
| 0°-60° | 0.0 | 0.0 |
| 0°-90° | 2.0 | 0.1 |
| 90°-120° | 563.8 | 21.3 |
| 90°-150° | 1908.3 | 72.1 |
| 90°-180° | 2644.0 | 99.9 |
| 0°-180° | 2645.9 | 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 | 8 | 18 | 21 | 22 | 3 |
| 95° | 44 | 50 | 56 | 58 | 58 | 49 |
| 105° | 169 | 170 | 177 | 177 | 178 | 181 |
| 115° | 319 | 321 | 319 | 320 | 319 | 315 |
| 125° | 466 | 468 | 467 | 464 | 461 | 416 |
| 135° | 605 | 609 | 609 | 606 | 604 | 466 |
| 145° | 734 | 735 | 738 | 737 | 734 | 458 |
| 155° | 840 | 840 | 841 | 844 | 839 | 387 |
| 165° | 915 | 913 | 913 | 918 | 912 | 258 |
| 175° | 952 | 949 | 949 | 953 | 948 | 90 |
| 180° | 954 | 954 | 954 | 954 | 954 | |



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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° | 0.7 | 8.2 | 18.0 | 21.0 | 22.5 |
| 92.5° | 22.5 | 27.0 | 31.5 | 33.7 | 32.2 |
| 95° | 44.2 | 49.5 | 55.5 | 58.5 | 58.5 |
| 97.5° | 72.7 | 76.5 | 81.0 | 84.7 | 84.0 |
| 100° | 101.9 | 106.4 | 110.2 | 112.4 | 113.9 |
| 102.5° | 135.7 | 137.9 | 143.2 | 145.4 | 144.7 |
| 105° | 168.7 | 170.2 | 176.9 | 176.9 | 178.4 |
| 107.5° | 207.6 | 208.4 | 211.4 | 213.6 | 212.9 |
| 110° | 243.6 | 245.1 | 246.6 | 249.6 | 248.1 |



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CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|-------|-------|-------|-------|-------|
| 112.5° | 281.1 | 281.8 | 281.8 | 285.6 | 285.6 |
| 115° | 318.6 | 320.8 | 319.3 | 320.1 | 319.3 |
| 117.5° | 356.8 | 357.5 | 356.0 | 356.0 | 353.8 |
| 120° | 392.0 | 396.5 | 392.8 | 392.0 | 390.5 |
| 122.5° | 428.7 | 431.7 | 430.2 | 428.0 | 425.8 |
| 125° | 466.2 | 468.5 | 467.0 | 464.0 | 461.0 |
| 127.5° | 500.7 | 505.2 | 503.7 | 499.2 | 496.2 |
| 130° | 535.2 | 541.2 | 538.9 | 535.9 | 530.7 |
| 132.5° | 569.7 | 575.7 | 574.2 | 570.4 | 566.7 |
| 135° | 604.9 | 609.4 | 608.6 | 605.6 | 604.1 |
| 137.5° | 637.1 | 640.9 | 643.1 | 639.4 | 637.1 |
| 140° | 670.9 | 674.6 | 675.4 | 674.6 | 669.4 |
| 142.5° | 701.6 | 705.3 | 706.8 | 706.1 | 702.3 |
| 145° | 733.8 | 735.3 | 737.6 | 736.8 | 733.8 |
| 147.5° | 761.6 | 764.6 | 766.8 | 766.8 | 762.3 |
| 150° | 790.8 | 792.3 | 793.8 | 793.8 | 789.3 |
| 152.5° | 814.8 | 817.0 | 817.8 | 819.3 | 815.5 |
| 155° | 840.3 | 840.3 | 841.0 | 844.0 | 838.8 |
| 157.5° | 862.0 | 861.2 | 862.0 | 865.0 | 860.5 |
| 160° | 882.2 | 880.7 | 880.7 | 884.5 | 881.5 |
| 162.5° | 900.2 | 898.0 | 898.7 | 902.5 | 897.2 |
| 165° | 915.2 | 913.0 | 913.0 | 917.5 | 912.2 |
| 167.5° | 928.0 | 925.0 | 925.7 | 930.2 | 925.7 |
| 170° | 938.5 | 935.5 | 935.5 | 940.7 | 935.5 |
| 172.5° | 946.7 | 943.7 | 943.7 | 948.2 | 943.0 |
| 175° | 951.9 | 948.9 | 948.9 | 953.4 | 948.2 |
| 177.5° | 954.9 | 951.9 | 951.9 | 956.4 | 951.2 |
| 180° | 954.2 | 954.2 | 954.2 | 954.2 | 954.2 |

(END OF REPORT)