

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: CORELITE

Report Number: P213083

Luminaire Tested: **DSI-WD-40L830-1D-UNV-4-STD-FC-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P213083
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P35734)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: DSI-WD-40L830-1D-UNV-4-STD-FC-W
Description: DIVIDE 4' SUSPENDED WAVESTREAM LED LUMINAIRE
WaveStream DIFFUSE OPTIC WITH FROSTED COVER, LIGHT LEVEL 3.
Light Source: (308) 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3864.1 lumens
Efficiency: N/A
Efficacy: 128.8 lumens/watt
Spacing Criteria (0/90/45): 1.34 / 1.43 / 1.52
Luminous Opening: Rectangular (W 0.83' x L: 3.83' x H: 0')
CIE Type: Semi-Direct

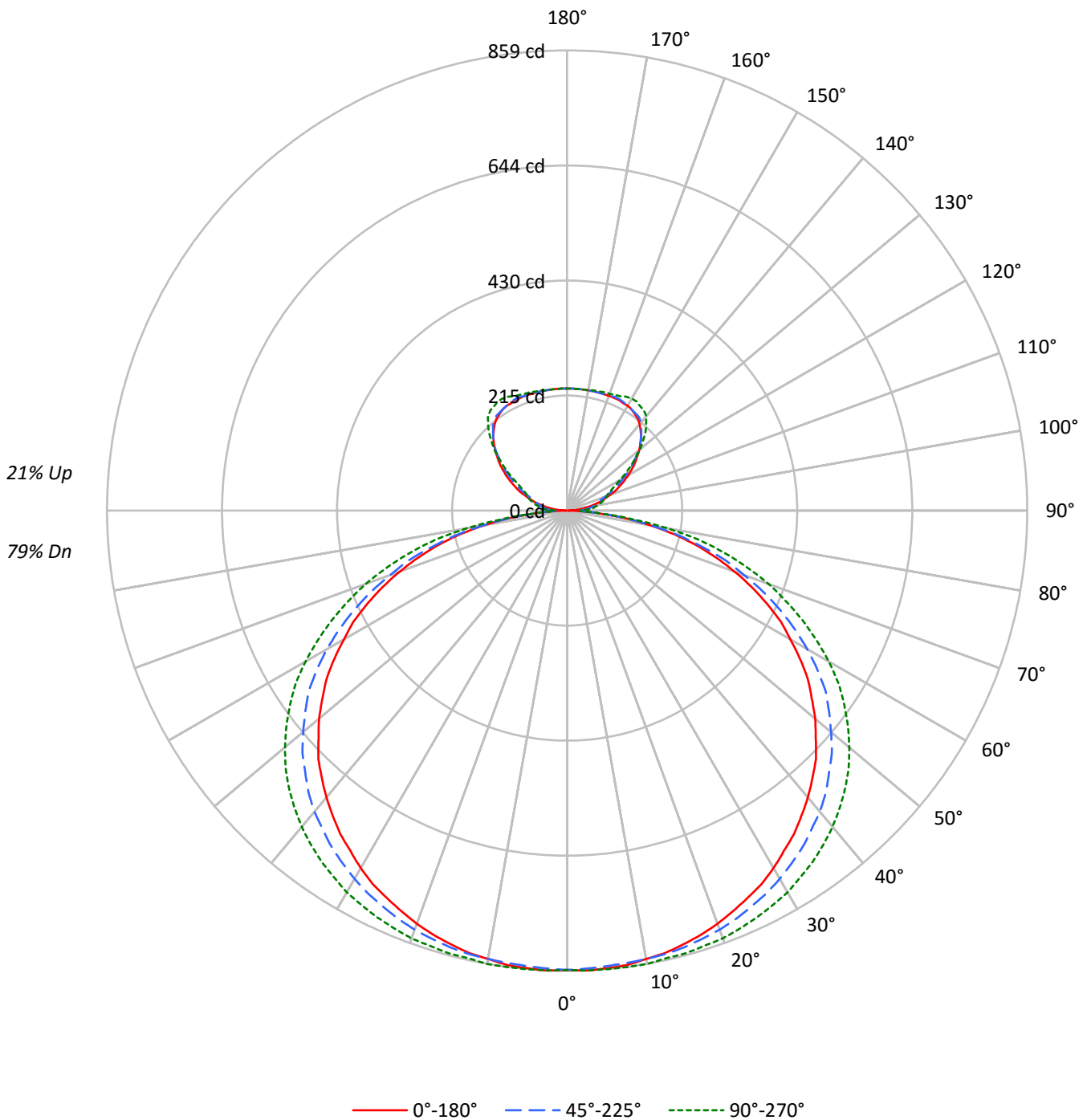
Input Watts (W): 30
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P213083

CATALOG NUMBER: DSI-WD-40L830-1D-UNV-4-STD-FC-W

Luminous Intensity Polar Plot





TEST NUMBER: P213083

CATALOG NUMBER: DSI-WD-40L830-1D-UNV-4-STD-FC-W

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 | 114 | 114 | 114 | 114 | 109 | 109 | 109 | 109 | 99 | 99 | 99 | | 91 | 91 | 91 | | 82 | 82 | 82 | 79 |
| 1 | 103 | 98 | 94 | 90 | 98 | 94 | 90 | 86 | 86 | 83 | 80 | | 78 | 76 | 73 | | 71 | 69 | 68 | 64 |
| 2 | 93 | 85 | 78 | 72 | 89 | 81 | 75 | 69 | 74 | 69 | 64 | | 68 | 63 | 60 | | 62 | 58 | 55 | 52 |
| 3 | 84 | 74 | 65 | 59 | 80 | 71 | 63 | 57 | 64 | 58 | 53 | | 59 | 54 | 50 | | 54 | 50 | 46 | 43 |
| 4 | 77 | 65 | 56 | 49 | 73 | 62 | 54 | 48 | 57 | 50 | 45 | | 52 | 46 | 42 | | 47 | 43 | 39 | 36 |
| 5 | 70 | 57 | 48 | 42 | 67 | 55 | 47 | 40 | 51 | 44 | 38 | | 46 | 40 | 36 | | 42 | 37 | 34 | 31 |
| 6 | 65 | 51 | 42 | 36 | 61 | 49 | 41 | 35 | 45 | 38 | 33 | | 42 | 36 | 31 | | 38 | 33 | 29 | 27 |
| 7 | 60 | 46 | 38 | 31 | 57 | 44 | 36 | 31 | 41 | 34 | 29 | | 38 | 32 | 27 | | 35 | 30 | 26 | 23 |
| 8 | 56 | 42 | 34 | 28 | 53 | 40 | 32 | 27 | 37 | 30 | 26 | | 34 | 28 | 24 | | 32 | 27 | 23 | 21 |
| 9 | 52 | 38 | 30 | 25 | 49 | 37 | 29 | 24 | 34 | 27 | 23 | | 32 | 26 | 22 | | 29 | 24 | 20 | 18 |
| 10 | 48 | 35 | 27 | 22 | 46 | 34 | 27 | 22 | 31 | 25 | 21 | | 29 | 23 | 19 | | 27 | 22 | 18 | 17 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|------|------|------|
| 0° | 2889 | 2889 | 2889 |
| 5° | 2900 | 2887 | 2907 |
| 10° | 2908 | 2908 | 2940 |
| 15° | 2924 | 2944 | 2985 |
| 20° | 2943 | 2985 | 3047 |
| 25° | 2965 | 3030 | 3116 |
| 30° | 2998 | 3089 | 3201 |
| 35° | 3035 | 3154 | 3289 |
| 40° | 3075 | 3228 | 3390 |
| 45° | 3129 | 3295 | 3497 |
| 50° | 3169 | 3371 | 3604 |
| 55° | 3222 | 3461 | 3710 |
| 60° | 3241 | 3488 | 3800 |
| 65° | 3280 | 3495 | 3865 |
| 70° | 3273 | 3463 | 3939 |
| 75° | 3243 | 3394 | 3947 |
| 80° | 3035 | 3074 | 3673 |
| 85° | 2239 | 2389 | 2463 |



TEST NUMBER: P213083

CATALOG NUMBER: DSI-WD-40L830-1D-UNV-4-STD-FC-W

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 81.7 | 2.1 |
| 10°-20° | 239.3 | 6.2 |
| 20°-30° | 377.3 | 9.8 |
| 30°-40° | 480.8 | 12.4 |
| 40°-50° | 535.4 | 13.9 |
| 50°-60° | 525.1 | 13.6 |
| 60°-70° | 438.7 | 11.4 |
| 70°-80° | 282.6 | 7.3 |
| 80°-90° | 79.4 | 2.1 |
| 90°-100° | 38.4 | 1.0 |
| 100°-110° | 67.5 | 1.7 |
| 110°-120° | 98.8 | 2.6 |
| 120°-130° | 132.8 | 3.4 |
| 130°-140° | 151.9 | 3.9 |
| 140°-150° | 141.4 | 3.7 |
| 150°-160° | 106.6 | 2.8 |
| 160°-170° | 64.8 | 1.7 |
| 170°-180° | 21.8 | 0.6 |
| 0°-30° | 698.3 | 18.1 |
| 0°-40° | 1179.1 | 30.5 |
| 0°-60° | 2239.6 | 58.0 |
| 0°-90° | 3040.2 | 78.7 |
| 90°-120° | 204.7 | 5.3 |
| 90°-150° | 630.6 | 16.3 |
| 90°-180° | 824.0 | 21.3 |
| 0°-180° | 3864.1 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|-----|-------|-----|-------|-----|------|
| 0° | 858 | 858 | 858 | 858 | 858 | |
| 5° | 858 | 858 | 854 | 859 | 859 | 82 |
| 15° | 838 | 842 | 844 | 852 | 856 | 237 |
| 25° | 798 | 803 | 815 | 832 | 838 | 368 |
| 35° | 738 | 746 | 767 | 790 | 800 | 462 |
| 45° | 657 | 666 | 691 | 722 | 734 | 505 |
| 55° | 548 | 560 | 589 | 616 | 632 | 488 |
| 65° | 411 | 421 | 438 | 471 | 485 | 406 |
| 75° | 249 | 253 | 261 | 290 | 303 | 261 |
| 85° | 58 | 60 | 62 | 66 | 64 | 69 |
| 90° | 2 | 14 | 19 | 23 | 23 | 5 |
| 95° | 19 | 29 | 39 | 44 | 48 | 20 |
| 105° | 64 | 60 | 60 | 68 | 70 | 66 |
| 115° | 108 | 106 | 98 | 93 | 91 | 108 |
| 125° | 154 | 151 | 149 | 145 | 145 | 138 |
| 135° | 195 | 191 | 195 | 203 | 207 | 150 |
| 145° | 220 | 218 | 222 | 234 | 238 | 138 |
| 155° | 228 | 228 | 230 | 234 | 236 | 105 |
| 165° | 228 | 228 | 228 | 230 | 230 | 65 |
| 175° | 228 | 228 | 228 | 228 | 228 | 22 |
| 180° | 228 | 228 | 228 | 228 | 228 | |



TEST NUMBER: P213083

CATALOG NUMBER: DSI-WD-40L830-1D-UNV-4-STD-FC-W

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|-------|-------|-------|-------|-------|
| 0° | 857.5 | 857.5 | 857.5 | 857.5 | 857.5 |
| 2.5° | 859.4 | 859.4 | 855.6 | 859.4 | 859.4 |
| 5° | 857.5 | 857.5 | 853.6 | 859.4 | 859.4 |
| 7.5° | 855.6 | 855.6 | 851.7 | 859.4 | 859.4 |
| 10° | 849.8 | 851.7 | 849.8 | 857.5 | 859.4 |
| 12.5° | 845.9 | 847.9 | 847.9 | 855.6 | 855.6 |
| 15° | 838.2 | 842.1 | 844.0 | 851.7 | 855.6 |
| 17.5° | 830.5 | 834.3 | 838.2 | 847.9 | 851.7 |
| 20° | 820.8 | 824.7 | 832.4 | 844.0 | 849.8 |
| 22.5° | 809.2 | 815.0 | 824.7 | 838.2 | 844.0 |
| 25° | 797.6 | 803.4 | 815.0 | 832.4 | 838.2 |
| 27.5° | 786.0 | 791.8 | 805.4 | 822.7 | 830.5 |
| 30° | 770.6 | 778.3 | 793.8 | 813.1 | 822.7 |
| 32.5° | 753.2 | 762.9 | 780.3 | 801.5 | 811.2 |
| 35° | 737.8 | 745.5 | 766.7 | 789.9 | 799.6 |
| 37.5° | 718.5 | 728.1 | 749.4 | 776.4 | 786.0 |
| 40° | 699.1 | 710.7 | 733.9 | 759.0 | 770.6 |
| 42.5° | 677.9 | 687.6 | 714.6 | 741.6 | 753.2 |
| 45° | 656.6 | 666.3 | 691.4 | 722.3 | 733.9 |
| 47.5° | 629.6 | 643.1 | 670.2 | 701.1 | 712.7 |
| 50° | 604.5 | 616.1 | 643.1 | 676.0 | 687.6 |
| 52.5° | 575.5 | 591.0 | 616.1 | 647.0 | 660.5 |
| 55° | 548.5 | 560.1 | 589.1 | 616.1 | 631.5 |
| 57.5° | 515.7 | 529.2 | 554.3 | 583.3 | 600.6 |
| 60° | 480.9 | 494.4 | 517.6 | 546.6 | 563.9 |
| 62.5° | 450.0 | 457.7 | 479.0 | 509.9 | 525.3 |
| 65° | 411.4 | 421.0 | 438.4 | 471.2 | 484.8 |
| 67.5° | 372.7 | 380.5 | 395.9 | 428.8 | 442.3 |
| 70° | 332.2 | 339.9 | 351.5 | 384.3 | 399.8 |
| 72.5° | 291.6 | 297.4 | 310.9 | 338.0 | 351.5 |
| 75° | 249.1 | 253.0 | 260.7 | 289.7 | 303.2 |
| 77.5° | 204.7 | 204.7 | 212.4 | 237.6 | 251.1 |
| 80° | 156.4 | 156.4 | 158.4 | 181.5 | 189.3 |
| 82.5° | 108.2 | 104.3 | 108.2 | 121.7 | 123.6 |
| 85° | 57.9 | 59.9 | 61.8 | 65.7 | 63.7 |
| 87.5° | 21.2 | 25.1 | 27.0 | 25.1 | 25.1 |
| 90° | 1.9 | 13.5 | 19.3 | 23.2 | 23.2 |
| 92.5° | 9.7 | 23.2 | 32.8 | 34.8 | 36.7 |
| 95° | 19.3 | 29.0 | 38.6 | 44.4 | 48.3 |
| 97.5° | 30.9 | 32.8 | 44.4 | 52.1 | 52.1 |
| 100° | 40.6 | 40.6 | 50.2 | 57.9 | 57.9 |
| 102.5° | 52.1 | 50.2 | 56.0 | 61.8 | 63.7 |
| 105° | 63.7 | 59.9 | 59.9 | 67.6 | 69.5 |
| 107.5° | 73.4 | 71.5 | 65.7 | 73.4 | 75.3 |
| 110° | 85.0 | 83.0 | 75.3 | 77.3 | 79.2 |



TEST NUMBER: P213083

CATALOG NUMBER: DSI-WD-40L830-1D-UNV-4-STD-FC-W

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|-------|-------|-------|-------|-------|
| 112.5° | 98.5 | 94.6 | 86.9 | 83.0 | 83.0 |
| 115° | 108.2 | 106.2 | 98.5 | 92.7 | 90.8 |
| 117.5° | 119.7 | 115.9 | 110.1 | 104.3 | 100.4 |
| 120° | 131.3 | 127.5 | 121.7 | 117.8 | 113.9 |
| 122.5° | 142.9 | 141.0 | 135.2 | 131.3 | 129.4 |
| 125° | 154.5 | 150.6 | 148.7 | 144.8 | 144.8 |
| 127.5° | 164.2 | 162.2 | 160.3 | 160.3 | 160.3 |
| 130° | 175.8 | 171.9 | 173.8 | 173.8 | 177.7 |
| 132.5° | 185.4 | 181.5 | 185.4 | 189.3 | 191.2 |
| 135° | 195.1 | 191.2 | 195.1 | 202.8 | 206.7 |
| 137.5° | 202.8 | 200.9 | 204.7 | 214.4 | 218.2 |
| 140° | 210.5 | 208.6 | 214.4 | 224.0 | 229.8 |
| 142.5° | 216.3 | 214.4 | 220.2 | 229.8 | 235.6 |
| 145° | 220.2 | 218.2 | 222.1 | 233.7 | 237.6 |
| 147.5° | 224.0 | 222.1 | 224.0 | 237.6 | 241.4 |
| 150° | 226.0 | 226.0 | 226.0 | 237.6 | 241.4 |
| 152.5° | 226.0 | 226.0 | 227.9 | 233.7 | 239.5 |
| 155° | 227.9 | 227.9 | 229.8 | 233.7 | 235.6 |
| 157.5° | 227.9 | 227.9 | 229.8 | 231.8 | 233.7 |
| 160° | 227.9 | 227.9 | 227.9 | 231.8 | 231.8 |
| 162.5° | 227.9 | 227.9 | 227.9 | 229.8 | 231.8 |
| 165° | 227.9 | 227.9 | 227.9 | 229.8 | 229.8 |
| 167.5° | 227.9 | 227.9 | 227.9 | 229.8 | 229.8 |
| 170° | 227.9 | 227.9 | 227.9 | 227.9 | 227.9 |
| 172.5° | 227.9 | 227.9 | 227.9 | 227.9 | 227.9 |
| 175° | 227.9 | 227.9 | 227.9 | 227.9 | 227.9 |
| 177.5° | 227.9 | 227.9 | 227.9 | 227.9 | 227.9 |
| 180° | 227.9 | 227.9 | 227.9 | 227.9 | 227.9 |

(END OF REPORT)