

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: P213093

Luminaire Tested: **DSI-WD-40L840-1D-UNV-4-STD-FC-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P213093
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-40L840-1D-UNV-4-STD-FC-W
Description: DIVIDE 4' SUSPENDED WAVESTREAM LED LUMINAIRE
WaveStream DIFFUSE OPTIC WITH FROSTED COVER, LIGHT LEVEL 3.
Light Source: (308) 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4095.9 lumens
Efficiency: N/A
Efficacy: 136.5 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

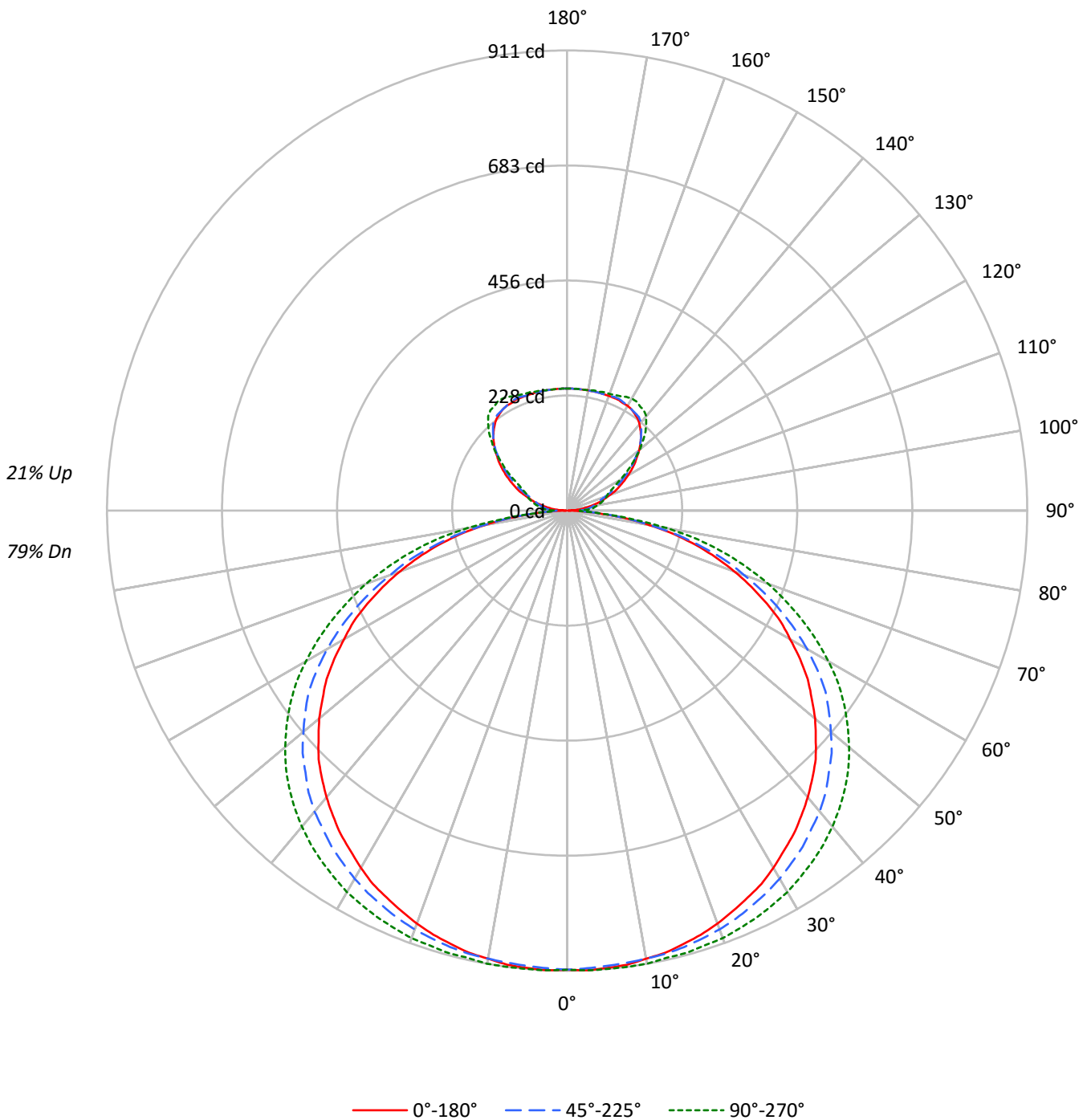
Input Watts (W): 30
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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 | 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° | 3063 | 3063 | 3063 |
| 5° | 3075 | 3061 | 3081 |
| 10° | 3082 | 3082 | 3117 |
| 15° | 3099 | 3121 | 3164 |
| 20° | 3120 | 3164 | 3230 |
| 25° | 3143 | 3212 | 3303 |
| 30° | 3178 | 3274 | 3393 |
| 35° | 3217 | 3343 | 3486 |
| 40° | 3260 | 3422 | 3593 |
| 45° | 3317 | 3492 | 3707 |
| 50° | 3359 | 3574 | 3820 |
| 55° | 3416 | 3668 | 3933 |
| 60° | 3436 | 3698 | 4029 |
| 65° | 3477 | 3705 | 4097 |
| 70° | 3469 | 3671 | 4175 |
| 75° | 3438 | 3598 | 4184 |
| 80° | 3217 | 3258 | 3893 |
| 85° | 2374 | 2532 | 2614 |



TEST NUMBER: P213093

CATALOG NUMBER: DSI-WD-40L840-1D-UNV-4-STD-FC-W

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 86.6 | 2.1 |
| 10°-20° | 253.7 | 6.2 |
| 20°-30° | 399.9 | 9.8 |
| 30°-40° | 509.6 | 12.4 |
| 40°-50° | 567.5 | 13.9 |
| 50°-60° | 556.6 | 13.6 |
| 60°-70° | 465.0 | 11.4 |
| 70°-80° | 299.6 | 7.3 |
| 80°-90° | 84.2 | 2.1 |
| 90°-100° | 40.7 | 1.0 |
| 100°-110° | 71.6 | 1.7 |
| 110°-120° | 104.7 | 2.6 |
| 120°-130° | 140.7 | 3.4 |
| 130°-140° | 161.0 | 3.9 |
| 140°-150° | 149.8 | 3.7 |
| 150°-160° | 113.0 | 2.8 |
| 160°-170° | 68.7 | 1.7 |
| 170°-180° | 23.1 | 0.6 |
| 0°-30° | 740.2 | 18.1 |
| 0°-40° | 1249.8 | 30.5 |
| 0°-60° | 2373.9 | 58.0 |
| 0°-90° | 3222.6 | 78.7 |
| 90°-120° | 217.0 | 5.3 |
| 90°-150° | 668.5 | 16.3 |
| 90°-180° | 873.0 | 21.3 |
| 0°-180° | 4095.9 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|-----|-------|-----|-------|-----|------|
| 0° | 909 | 909 | 909 | 909 | 909 | |
| 5° | 909 | 909 | 905 | 911 | 911 | 87 |
| 15° | 888 | 893 | 895 | 903 | 907 | 251 |
| 25° | 846 | 852 | 864 | 882 | 888 | 390 |
| 35° | 782 | 790 | 813 | 837 | 848 | 489 |
| 45° | 696 | 706 | 733 | 766 | 778 | 536 |
| 55° | 581 | 594 | 624 | 653 | 669 | 518 |
| 65° | 436 | 446 | 465 | 500 | 514 | 431 |
| 75° | 264 | 268 | 276 | 307 | 321 | 277 |
| 85° | 61 | 64 | 66 | 70 | 68 | 73 |
| 90° | 2 | 14 | 20 | 25 | 25 | 5 |
| 95° | 20 | 31 | 41 | 47 | 51 | 22 |
| 105° | 68 | 64 | 64 | 72 | 74 | 71 |
| 115° | 115 | 113 | 104 | 98 | 96 | 114 |
| 125° | 164 | 160 | 158 | 154 | 154 | 146 |
| 135° | 207 | 203 | 207 | 215 | 219 | 159 |
| 145° | 233 | 231 | 235 | 248 | 252 | 146 |
| 155° | 242 | 242 | 244 | 248 | 250 | 111 |
| 165° | 242 | 242 | 242 | 244 | 244 | 68 |
| 175° | 242 | 242 | 242 | 242 | 242 | 23 |
| 180° | 242 | 242 | 242 | 242 | 242 | |



TEST NUMBER: P213093

CATALOG NUMBER: DSI-WD-40L840-1D-UNV-4-STD-FC-W

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|-------|-------|-------|-------|-------|
| 0° | 909.0 | 909.0 | 909.0 | 909.0 | 909.0 |
| 2.5° | 911.0 | 911.0 | 906.9 | 911.0 | 911.0 |
| 5° | 909.0 | 909.0 | 904.9 | 911.0 | 911.0 |
| 7.5° | 906.9 | 906.9 | 902.8 | 911.0 | 911.0 |
| 10° | 900.8 | 902.8 | 900.8 | 909.0 | 911.0 |
| 12.5° | 896.7 | 898.7 | 898.7 | 906.9 | 906.9 |
| 15° | 888.5 | 892.6 | 894.6 | 902.8 | 906.9 |
| 17.5° | 880.3 | 884.4 | 888.5 | 898.7 | 902.8 |
| 20° | 870.1 | 874.2 | 882.3 | 894.6 | 900.8 |
| 22.5° | 857.8 | 863.9 | 874.2 | 888.5 | 894.6 |
| 25° | 845.5 | 851.6 | 863.9 | 882.3 | 888.5 |
| 27.5° | 833.2 | 839.4 | 853.7 | 872.1 | 880.3 |
| 30° | 816.8 | 825.0 | 841.4 | 861.9 | 872.1 |
| 32.5° | 798.4 | 808.6 | 827.1 | 849.6 | 859.8 |
| 35° | 782.0 | 790.2 | 812.7 | 837.3 | 847.5 |
| 37.5° | 761.6 | 771.8 | 794.3 | 823.0 | 833.2 |
| 40° | 741.1 | 753.4 | 777.9 | 804.6 | 816.8 |
| 42.5° | 718.6 | 728.8 | 757.5 | 786.1 | 798.4 |
| 45° | 696.0 | 706.3 | 732.9 | 765.7 | 777.9 |
| 47.5° | 667.4 | 681.7 | 710.4 | 743.1 | 755.4 |
| 50° | 640.8 | 653.1 | 681.7 | 716.5 | 728.8 |
| 52.5° | 610.1 | 626.4 | 653.1 | 685.8 | 700.1 |
| 55° | 581.4 | 593.7 | 624.4 | 653.1 | 669.4 |
| 57.5° | 546.6 | 560.9 | 587.5 | 618.3 | 636.7 |
| 60° | 509.8 | 524.1 | 548.7 | 579.4 | 597.8 |
| 62.5° | 477.0 | 485.2 | 507.7 | 540.5 | 556.8 |
| 65° | 436.1 | 446.3 | 464.7 | 499.5 | 513.8 |
| 67.5° | 395.1 | 403.3 | 419.7 | 454.5 | 468.8 |
| 70° | 352.1 | 360.3 | 372.6 | 407.4 | 423.8 |
| 72.5° | 309.1 | 315.3 | 329.6 | 358.3 | 372.6 |
| 75° | 264.1 | 268.2 | 276.4 | 307.1 | 321.4 |
| 77.5° | 217.0 | 217.0 | 225.2 | 251.8 | 266.1 |
| 80° | 165.8 | 165.8 | 167.9 | 192.4 | 200.6 |
| 82.5° | 114.6 | 110.5 | 114.6 | 129.0 | 131.0 |
| 85° | 61.4 | 63.5 | 65.5 | 69.6 | 67.6 |
| 87.5° | 22.5 | 26.6 | 28.7 | 26.6 | 26.6 |
| 90° | 2.0 | 14.3 | 20.5 | 24.6 | 24.6 |
| 92.5° | 10.2 | 24.6 | 34.8 | 36.8 | 38.9 |
| 95° | 20.5 | 30.7 | 40.9 | 47.1 | 51.2 |
| 97.5° | 32.8 | 34.8 | 47.1 | 55.3 | 55.3 |
| 100° | 43.0 | 43.0 | 53.2 | 61.4 | 61.4 |
| 102.5° | 55.3 | 53.2 | 59.4 | 65.5 | 67.6 |
| 105° | 67.6 | 63.5 | 63.5 | 71.7 | 73.7 |
| 107.5° | 77.8 | 75.7 | 69.6 | 77.8 | 79.8 |
| 110° | 90.1 | 88.0 | 79.8 | 81.9 | 83.9 |



TEST NUMBER: P213093

CATALOG NUMBER: DSI-WD-40L840-1D-UNV-4-STD-FC-W

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|-------|-------|-------|-------|-------|
| 112.5° | 104.4 | 100.3 | 92.1 | 88.0 | 88.0 |
| 115° | 114.6 | 112.6 | 104.4 | 98.3 | 96.2 |
| 117.5° | 126.9 | 122.8 | 116.7 | 110.5 | 106.5 |
| 120° | 139.2 | 135.1 | 129.0 | 124.9 | 120.8 |
| 122.5° | 151.5 | 149.4 | 143.3 | 139.2 | 137.2 |
| 125° | 163.8 | 159.7 | 157.6 | 153.5 | 153.5 |
| 127.5° | 174.0 | 172.0 | 169.9 | 169.9 | 169.9 |
| 130° | 186.3 | 182.2 | 184.2 | 184.2 | 188.3 |
| 132.5° | 196.5 | 192.4 | 196.5 | 200.6 | 202.7 |
| 135° | 206.8 | 202.7 | 206.8 | 215.0 | 219.1 |
| 137.5° | 215.0 | 212.9 | 217.0 | 227.2 | 231.3 |
| 140° | 223.1 | 221.1 | 227.2 | 237.5 | 243.6 |
| 142.5° | 229.3 | 227.2 | 233.4 | 243.6 | 249.8 |
| 145° | 233.4 | 231.3 | 235.4 | 247.7 | 251.8 |
| 147.5° | 237.5 | 235.4 | 237.5 | 251.8 | 255.9 |
| 150° | 239.5 | 239.5 | 239.5 | 251.8 | 255.9 |
| 152.5° | 239.5 | 239.5 | 241.6 | 247.7 | 253.9 |
| 155° | 241.6 | 241.6 | 243.6 | 247.7 | 249.8 |
| 157.5° | 241.6 | 241.6 | 243.6 | 245.7 | 247.7 |
| 160° | 241.6 | 241.6 | 241.6 | 245.7 | 245.7 |
| 162.5° | 241.6 | 241.6 | 241.6 | 243.6 | 245.7 |
| 165° | 241.6 | 241.6 | 241.6 | 243.6 | 243.6 |
| 167.5° | 241.6 | 241.6 | 241.6 | 243.6 | 243.6 |
| 170° | 241.6 | 241.6 | 241.6 | 241.6 | 241.6 |
| 172.5° | 241.6 | 241.6 | 241.6 | 241.6 | 241.6 |
| 175° | 241.6 | 241.6 | 241.6 | 241.6 | 241.6 |
| 177.5° | 241.6 | 241.6 | 241.6 | 241.6 | 241.6 |
| 180° | 241.6 | 241.6 | 241.6 | 241.6 | 241.6 |

(END OF REPORT)