

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: P213069

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

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P213069  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P35733)  
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-DC-W  
Description: DIVIDE 4' SUSPENDED WAVESTREAM LED LUMINAIRE  
WaveStream DIFFUSE OPTIC WITH DUST COVER, LIGHT LEVEL 3.  
Light Source: (308) 3000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3863.9 lumens  
Efficiency: N/A  
Efficacy: 128.8 lumens/watt  
Spacing Criteria (0/90/45): 1.34 / 1.47 / 1.55  
Luminous Opening: Rectangular (W 0.83' x L: 3.83' x H: 0')  
CIE Type: Semi-Direct

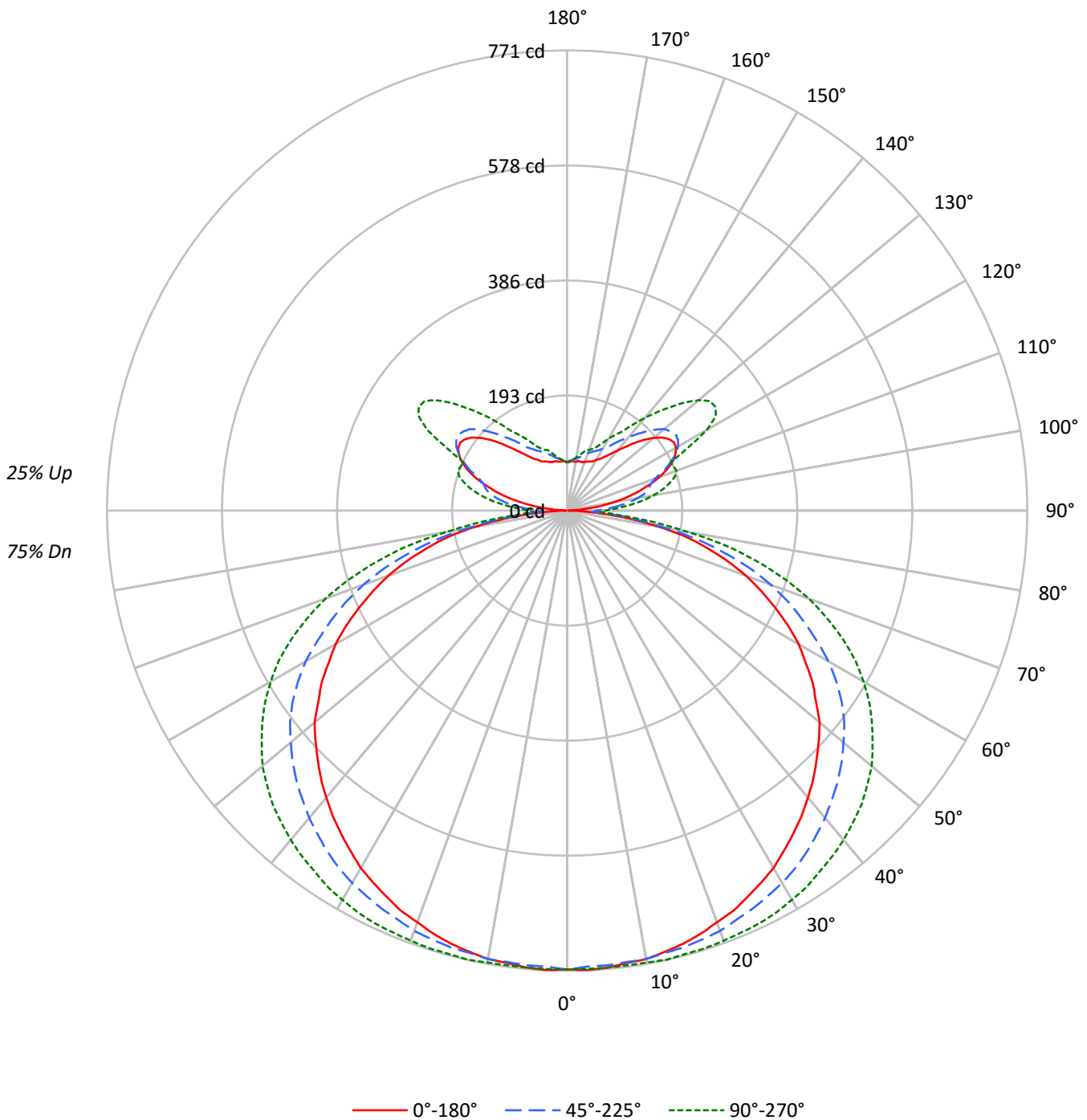
Input Watts (W): 30  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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   | 113 | 113 | 113 | 113 | 108 | 108 | 108 | 108 | 97 | 97 | 97 | 88 | 88 | 88 | 79 | 79 | 79 | 75 |
| 1   | 102 | 97  | 92  | 88  | 97  | 92  | 88  | 84  | 83 | 80 | 77 | 75 | 73 | 70 | 68 | 66 | 64 | 60 |
| 2   | 92  | 83  | 76  | 70  | 87  | 79  | 73  | 67  | 72 | 67 | 62 | 65 | 61 | 57 | 58 | 55 | 52 | 49 |
| 3   | 83  | 72  | 64  | 57  | 79  | 69  | 61  | 55  | 62 | 56 | 51 | 56 | 51 | 47 | 51 | 47 | 43 | 40 |
| 4   | 76  | 63  | 55  | 48  | 71  | 60  | 52  | 46  | 55 | 48 | 43 | 50 | 44 | 39 | 45 | 40 | 36 | 33 |
| 5   | 69  | 56  | 47  | 40  | 65  | 54  | 45  | 39  | 49 | 42 | 36 | 44 | 38 | 34 | 40 | 35 | 31 | 28 |
| 6   | 64  | 50  | 41  | 35  | 60  | 48  | 40  | 34  | 44 | 37 | 31 | 40 | 34 | 29 | 36 | 31 | 27 | 24 |
| 7   | 59  | 45  | 36  | 30  | 56  | 43  | 35  | 29  | 39 | 32 | 27 | 36 | 30 | 26 | 32 | 27 | 24 | 21 |
| 8   | 54  | 41  | 32  | 27  | 52  | 39  | 31  | 26  | 36 | 29 | 24 | 33 | 27 | 23 | 30 | 25 | 21 | 19 |
| 9   | 51  | 37  | 29  | 24  | 48  | 36  | 28  | 23  | 33 | 26 | 22 | 30 | 24 | 20 | 27 | 22 | 19 | 17 |
| 10  | 47  | 34  | 26  | 21  | 45  | 33  | 26  | 21  | 30 | 24 | 19 | 28 | 22 | 18 | 25 | 20 | 17 | 15 |

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

|     | 0°   | 45°  | 90°  |
|-----|------|------|------|
| 0°  | 2590 | 2590 | 2590 |
| 5°  | 2600 | 2587 | 2600 |
| 10° | 2610 | 2610 | 2630 |
| 15° | 2621 | 2641 | 2682 |
| 20° | 2632 | 2687 | 2749 |
| 25° | 2657 | 2736 | 2836 |
| 30° | 2690 | 2803 | 2931 |
| 35° | 2717 | 2876 | 3035 |
| 40° | 2761 | 2956 | 3169 |
| 45° | 2816 | 3056 | 3322 |
| 50° | 2896 | 3169 | 3493 |
| 55° | 2950 | 3302 | 3665 |
| 60° | 3020 | 3410 | 3866 |
| 65° | 3064 | 3480 | 4065 |
| 70° | 3140 | 3577 | 4243 |
| 75° | 3168 | 3545 | 4300 |
| 80° | 3035 | 3260 | 3972 |
| 85° | 2239 | 2911 | 3360 |



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 73.2   | 1.9       |
| 10°-20°   | 214.8  | 5.6       |
| 20°-30°   | 340.8  | 8.8       |
| 30°-40°   | 438.4  | 11.3      |
| 40°-50°   | 496.8  | 12.9      |
| 50°-60°   | 502.4  | 13.0      |
| 60°-70°   | 438.9  | 11.4      |
| 70°-80°   | 295.5  | 7.6       |
| 80°-90°   | 94.4   | 2.4       |
| 90°-100°  | 85.4   | 2.2       |
| 100°-110° | 152.1  | 3.9       |
| 110°-120° | 193.8  | 5.0       |
| 120°-130° | 211.4  | 5.5       |
| 130°-140° | 152.3  | 3.9       |
| 140°-150° | 88.4   | 2.3       |
| 150°-160° | 50.2   | 1.3       |
| 160°-170° | 26.8   | 0.7       |
| 170°-180° | 8.2    | 0.2       |
| 0°-30°    | 628.8  | 16.3      |
| 0°-40°    | 1067.2 | 27.6      |
| 0°-60°    | 2066.5 | 53.5      |
| 0°-90°    | 2895.3 | 74.9      |
| 90°-120°  | 431.4  | 11.2      |
| 90°-150°  | 883.5  | 22.9      |
| 90°-180°  | 969.0  | 25.1      |
| 0°-180°   | 3863.9 | 100.0     |

**CANDELA DISTRIBUTION:**

|      | 0°  | 22.5° | 45° | 67.5° | 90° | Flux |
|------|-----|-------|-----|-------|-----|------|
| 0°   | 769 | 769   | 769 | 769   | 769 |      |
| 5°   | 769 | 769   | 765 | 769   | 769 | 73   |
| 15°  | 751 | 753   | 757 | 767   | 769 | 212  |
| 25°  | 715 | 722   | 736 | 755   | 763 | 330  |
| 35°  | 660 | 672   | 699 | 726   | 738 | 414  |
| 45°  | 591 | 608   | 641 | 682   | 697 | 457  |
| 55°  | 502 | 523   | 562 | 603   | 624 | 448  |
| 65°  | 384 | 409   | 436 | 487   | 510 | 380  |
| 75°  | 243 | 259   | 272 | 313   | 330 | 255  |
| 85°  | 58  | 62    | 75  | 85    | 87  | 68   |
| 90°  | 2   | 29    | 48  | 62    | 64  | 4    |
| 95°  | 29  | 60    | 85  | 100   | 104 | 34   |
| 105° | 124 | 122   | 141 | 168   | 178 | 130  |
| 115° | 195 | 187   | 191 | 195   | 191 | 190  |
| 125° | 209 | 209   | 222 | 274   | 303 | 185  |
| 135° | 160 | 170   | 187 | 224   | 245 | 125  |
| 145° | 110 | 124   | 137 | 154   | 162 | 71   |
| 155° | 91  | 98    | 110 | 114   | 118 | 42   |
| 165° | 85  | 89    | 95  | 98    | 100 | 24   |
| 175° | 83  | 83    | 85  | 85    | 85  | 8    |
| 180° | 81  | 81    | 81  | 81    | 81  |      |



TEST NUMBER: P213069

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

**CANDELA DISTRIBUTION (FULL):**

|        | 0°    | 22.5° | 45°   | 67.5° | 90°   |
|--------|-------|-------|-------|-------|-------|
| 0°     | 768.7 | 768.7 | 768.7 | 768.7 | 768.7 |
| 2.5°   | 770.6 | 768.7 | 764.8 | 768.7 | 768.7 |
| 5°     | 768.7 | 768.7 | 764.8 | 768.7 | 768.7 |
| 7.5°   | 764.8 | 766.7 | 762.9 | 768.7 | 768.7 |
| 10°    | 762.9 | 762.9 | 762.9 | 768.7 | 768.7 |
| 12.5°  | 757.1 | 759.0 | 759.0 | 766.7 | 770.6 |
| 15°    | 751.3 | 753.2 | 757.1 | 766.7 | 768.7 |
| 17.5°  | 743.6 | 747.4 | 753.2 | 764.8 | 768.7 |
| 20°    | 733.9 | 739.7 | 749.4 | 762.9 | 766.7 |
| 22.5°  | 726.2 | 732.0 | 741.6 | 759.0 | 764.8 |
| 25°    | 714.6 | 722.3 | 735.8 | 755.1 | 762.9 |
| 27.5°  | 703.0 | 710.7 | 728.1 | 749.4 | 759.0 |
| 30°    | 691.4 | 701.1 | 720.4 | 743.6 | 753.2 |
| 32.5°  | 676.0 | 687.6 | 710.7 | 735.8 | 747.4 |
| 35°    | 660.5 | 672.1 | 699.1 | 726.2 | 737.8 |
| 37.5°  | 645.1 | 658.6 | 685.6 | 716.5 | 730.0 |
| 40°    | 627.7 | 641.2 | 672.1 | 706.9 | 720.4 |
| 42.5°  | 610.3 | 625.7 | 656.7 | 693.3 | 708.8 |
| 45°    | 591.0 | 608.4 | 641.2 | 681.8 | 697.2 |
| 47.5°  | 571.7 | 589.1 | 623.8 | 666.3 | 681.8 |
| 50°    | 552.4 | 569.7 | 604.5 | 647.0 | 666.3 |
| 52.5°  | 525.3 | 546.6 | 585.2 | 625.7 | 645.1 |
| 55°    | 502.1 | 523.4 | 562.0 | 602.6 | 623.8 |
| 57.5°  | 473.2 | 498.3 | 535.0 | 577.5 | 600.6 |
| 60°    | 448.1 | 469.3 | 506.0 | 550.4 | 573.6 |
| 62.5°  | 417.2 | 440.3 | 471.2 | 519.5 | 544.6 |
| 65°    | 384.3 | 409.4 | 436.5 | 486.7 | 509.9 |
| 67.5°  | 351.5 | 374.7 | 401.7 | 448.1 | 471.2 |
| 70°    | 318.7 | 339.9 | 363.1 | 409.4 | 430.7 |
| 72.5°  | 282.0 | 301.3 | 320.6 | 363.1 | 382.4 |
| 75°    | 243.3 | 258.8 | 272.3 | 312.9 | 330.3 |
| 77.5°  | 204.7 | 212.4 | 224.0 | 258.8 | 274.2 |
| 80°    | 156.4 | 162.2 | 168.0 | 197.0 | 204.7 |
| 82.5°  | 106.2 | 110.1 | 117.8 | 135.2 | 142.9 |
| 85°    | 57.9  | 61.8  | 75.3  | 85.0  | 86.9  |
| 87.5°  | 19.3  | 30.9  | 44.4  | 52.1  | 56.0  |
| 90°    | 1.9   | 29.0  | 48.3  | 61.8  | 63.7  |
| 92.5°  | 9.7   | 44.4  | 65.7  | 77.3  | 81.1  |
| 95°    | 29.0  | 59.9  | 85.0  | 100.4 | 104.3 |
| 97.5°  | 54.1  | 75.3  | 104.3 | 121.7 | 127.5 |
| 100°   | 77.3  | 88.8  | 119.7 | 141.0 | 146.8 |
| 102.5° | 102.4 | 102.4 | 133.3 | 156.4 | 164.2 |
| 105°   | 123.6 | 121.7 | 141.0 | 168.0 | 177.7 |
| 107.5° | 144.8 | 139.1 | 146.8 | 177.7 | 189.3 |
| 110°   | 164.2 | 156.4 | 156.4 | 179.6 | 195.1 |



TEST NUMBER: P213069

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

**CANDELA DISTRIBUTION (continued):**

|        | 0°    | 22.5° | 45°   | 67.5° | 90°   |
|--------|-------|-------|-------|-------|-------|
| 112.5° | 181.5 | 171.9 | 175.8 | 179.6 | 193.1 |
| 115°   | 195.1 | 187.3 | 191.2 | 195.1 | 191.2 |
| 117.5° | 204.7 | 198.9 | 204.7 | 233.7 | 227.9 |
| 120°   | 210.5 | 206.7 | 214.4 | 258.8 | 270.4 |
| 122.5° | 212.4 | 210.5 | 220.2 | 270.4 | 295.5 |
| 125°   | 208.6 | 208.6 | 222.1 | 274.2 | 303.2 |
| 127.5° | 200.9 | 204.7 | 218.2 | 268.5 | 301.3 |
| 130°   | 189.3 | 195.1 | 212.4 | 256.9 | 287.8 |
| 132.5° | 175.8 | 183.5 | 200.9 | 241.4 | 268.5 |
| 135°   | 160.3 | 170.0 | 187.3 | 224.0 | 245.3 |
| 137.5° | 144.8 | 156.4 | 173.8 | 204.7 | 224.0 |
| 140°   | 131.3 | 144.8 | 160.3 | 187.3 | 202.8 |
| 142.5° | 119.7 | 133.3 | 148.7 | 170.0 | 181.5 |
| 145°   | 110.1 | 123.6 | 137.1 | 154.5 | 162.2 |
| 147.5° | 102.4 | 115.9 | 125.5 | 144.8 | 150.6 |
| 150°   | 98.5  | 108.2 | 119.7 | 133.3 | 139.1 |
| 152.5° | 92.7  | 102.4 | 113.9 | 121.7 | 127.5 |
| 155°   | 90.8  | 98.5  | 110.1 | 113.9 | 117.8 |
| 157.5° | 88.8  | 94.6  | 106.2 | 110.1 | 112.0 |
| 160°   | 86.9  | 92.7  | 102.4 | 108.2 | 108.2 |
| 162.5° | 85.0  | 90.8  | 98.5  | 104.3 | 106.2 |
| 165°   | 85.0  | 88.8  | 94.6  | 98.5  | 100.4 |
| 167.5° | 85.0  | 86.9  | 90.8  | 94.6  | 94.6  |
| 170°   | 83.0  | 85.0  | 88.8  | 90.8  | 90.8  |
| 172.5° | 83.0  | 85.0  | 86.9  | 88.8  | 86.9  |
| 175°   | 83.0  | 83.0  | 85.0  | 85.0  | 85.0  |
| 177.5° | 83.0  | 83.0  | 83.0  | 83.0  | 81.1  |
| 180°   | 81.1  | 81.1  | 81.1  | 81.1  | 81.1  |

(END OF REPORT)