

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: P220099

Luminaire Tested: **R3-WD-4L35-LD5-UNV-22**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P220099  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P35855)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: R3-WD-4L35-LD5-UNV-22  
Description: CLASS R3 2X2 RECESSED LED LUMIANIRE  
WITH A CLEAR SMOOTH ROUND LENS & ROUND PERF INLAY  
Light Source: (84) 3500K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3286.6 lumens  
Efficiency: N/A  
Efficacy: 107.8 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.37 / 1.43  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct

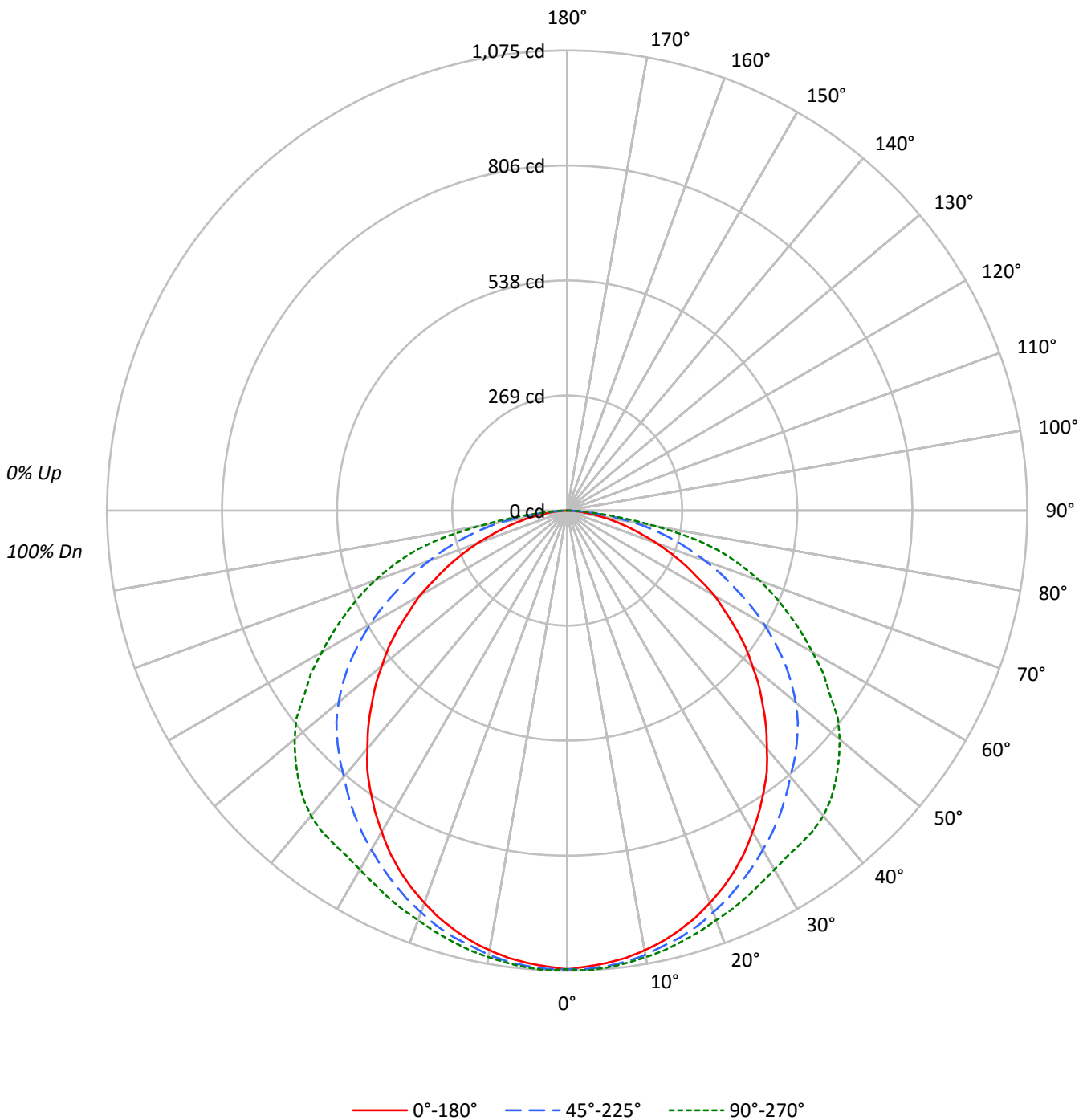
Input Watts (W): 30.5  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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   | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | 106 | 106 | 106 | 102 | 102 | 102 | 100 |
| 1   | 108 | 103 | 99  | 95  | 106 | 101 | 97  | 93  | 97  | 93  | 90  | 93  | 90  | 88  | 89  | 87  | 85  | 83  |
| 2   | 98  | 90  | 82  | 76  | 95  | 88  | 81  | 76  | 84  | 79  | 74  | 81  | 76  | 72  | 78  | 74  | 70  | 68  |
| 3   | 89  | 78  | 70  | 63  | 87  | 77  | 69  | 62  | 74  | 67  | 61  | 71  | 65  | 60  | 68  | 63  | 59  | 57  |
| 4   | 81  | 69  | 60  | 53  | 79  | 68  | 59  | 53  | 65  | 58  | 52  | 63  | 56  | 51  | 61  | 55  | 50  | 48  |
| 5   | 75  | 61  | 52  | 45  | 73  | 60  | 52  | 45  | 58  | 50  | 45  | 56  | 49  | 44  | 54  | 48  | 44  | 41  |
| 6   | 69  | 55  | 46  | 39  | 67  | 54  | 46  | 39  | 52  | 45  | 39  | 51  | 44  | 39  | 49  | 43  | 38  | 36  |
| 7   | 64  | 50  | 41  | 35  | 62  | 49  | 41  | 35  | 48  | 40  | 34  | 46  | 39  | 34  | 45  | 38  | 34  | 32  |
| 8   | 59  | 45  | 37  | 31  | 58  | 45  | 36  | 31  | 43  | 36  | 31  | 42  | 35  | 30  | 41  | 35  | 30  | 28  |
| 9   | 55  | 42  | 33  | 28  | 54  | 41  | 33  | 28  | 40  | 33  | 27  | 39  | 32  | 27  | 38  | 32  | 27  | 25  |
| 10  | 52  | 38  | 30  | 25  | 51  | 38  | 30  | 25  | 37  | 30  | 25  | 36  | 29  | 25  | 35  | 29  | 25  | 23  |

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

|     | 0°   | 45°  | 90°  |
|-----|------|------|------|
| 0°  | 2884 | 2884 | 2884 |
| 5°  | 2866 | 2885 | 2895 |
| 10° | 2850 | 2879 | 2894 |
| 15° | 2827 | 2871 | 2901 |
| 20° | 2793 | 2859 | 2916 |
| 25° | 2753 | 2848 | 2954 |
| 30° | 2693 | 2842 | 3008 |
| 35° | 2630 | 2847 | 3122 |
| 40° | 2549 | 2850 | 3270 |
| 45° | 2463 | 2891 | 3379 |
| 50° | 2366 | 2919 | 3478 |
| 55° | 2259 | 2911 | 3514 |
| 60° | 2140 | 2860 | 3560 |
| 65° | 1953 | 2770 | 3633 |
| 70° | 1754 | 2694 | 3760 |
| 75° | 1501 | 2614 | 3875 |
| 80° | 1216 | 2431 | 3233 |
| 85° | 880  | 1541 | 1871 |



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 101.4  | 3.1       |
| 10°-20°   | 290.6  | 8.8       |
| 20°-30°   | 442.9  | 13.5      |
| 30°-40°   | 545.5  | 16.6      |
| 40°-50°   | 589.5  | 17.9      |
| 50°-60°   | 551.6  | 16.8      |
| 60°-70°   | 433.7  | 13.2      |
| 70°-80°   | 267.4  | 8.1       |
| 80°-90°   | 63.8   | 1.9       |
| 90°-100°  | 0.0    | 0.0       |
| 100°-110° | 0.0    | 0.0       |
| 110°-120° | 0.0    | 0.0       |
| 120°-130° | 0.0    | 0.0       |
| 130°-140° | 0.0    | 0.0       |
| 140°-150° | 0.0    | 0.0       |
| 150°-160° | 0.0    | 0.0       |
| 160°-170° | 0.0    | 0.0       |
| 170°-180° | 0.0    | 0.0       |
| 0°-30°    | 834.9  | 25.4      |
| 0°-40°    | 1380.4 | 42.0      |
| 0°-60°    | 2521.6 | 76.7      |
| 0°-90°    | 3286.6 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 3286.6 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|-----|------|-------|------|-------|------|------|
| 0°  | 1072 | 1072  | 1072 | 1072  | 1072 |      |
| 5°  | 1061 | 1064  | 1068 | 1070  | 1072 | 101  |
| 15° | 1015 | 1020  | 1031 | 1040  | 1041 | 286  |
| 25° | 927  | 936   | 959  | 986   | 995  | 427  |
| 35° | 801  | 817   | 867  | 924   | 950  | 501  |
| 45° | 647  | 678   | 760  | 854   | 888  | 500  |
| 55° | 481  | 524   | 620  | 715   | 749  | 430  |
| 65° | 307  | 348   | 435  | 528   | 571  | 304  |
| 75° | 144  | 182   | 251  | 333   | 373  | 154  |
| 85° | 28   | 39    | 50   | 62    | 61   | 35   |
| 90° | 0    | 0     | 0    | 0     | 0    |      |



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|-------|--------|--------|--------|--------|--------|
| 0°    | 1071.6 | 1071.6 | 1071.6 | 1071.6 | 1071.6 |
| 2.5°  | 1066.3 | 1068.1 | 1071.6 | 1073.4 | 1075.2 |
| 5°    | 1060.9 | 1064.5 | 1068.1 | 1069.9 | 1071.6 |
| 7.5°  | 1053.8 | 1057.4 | 1062.7 | 1066.3 | 1066.3 |
| 10°   | 1043.1 | 1046.7 | 1053.8 | 1059.2 | 1059.2 |
| 12.5° | 1030.6 | 1034.2 | 1041.3 | 1050.2 | 1052.0 |
| 15°   | 1014.6 | 1019.9 | 1030.6 | 1039.6 | 1041.3 |
| 17.5° | 996.8  | 1002.1 | 1016.4 | 1027.1 | 1030.6 |
| 20°   | 975.4  | 982.5  | 998.5  | 1014.6 | 1018.2 |
| 22.5° | 952.2  | 961.1  | 980.7  | 1000.3 | 1007.5 |
| 25°   | 927.2  | 936.1  | 959.3  | 986.1  | 995.0  |
| 27.5° | 898.7  | 907.6  | 937.9  | 970.0  | 980.7  |
| 30°   | 866.6  | 880.9  | 914.7  | 952.2  | 968.2  |
| 32.5° | 834.5  | 848.8  | 891.6  | 937.9  | 957.5  |
| 35°   | 800.6  | 816.7  | 866.6  | 923.6  | 950.4  |
| 37.5° | 766.7  | 784.6  | 839.8  | 911.2  | 943.3  |
| 40°   | 725.7  | 748.9  | 811.3  | 898.7  | 930.8  |
| 42.5° | 688.3  | 713.2  | 786.3  | 879.1  | 913.0  |
| 45°   | 647.3  | 677.6  | 759.6  | 854.1  | 888.0  |
| 47.5° | 608.0  | 638.4  | 731.1  | 825.6  | 861.2  |
| 50°   | 565.2  | 600.9  | 697.2  | 793.5  | 830.9  |
| 52.5° | 526.0  | 561.7  | 659.7  | 756.0  | 797.0  |
| 55°   | 481.4  | 524.2  | 620.5  | 715.0  | 748.9  |
| 57.5° | 436.9  | 476.1  | 575.9  | 670.4  | 709.7  |
| 60°   | 397.6  | 433.3  | 531.4  | 624.1  | 661.5  |
| 62.5° | 347.7  | 390.5  | 485.0  | 575.9  | 617.0  |
| 65°   | 306.7  | 347.7  | 435.1  | 527.8  | 570.6  |
| 67.5° | 263.9  | 306.7  | 390.5  | 481.4  | 526.0  |
| 70°   | 222.9  | 262.1  | 342.4  | 433.3  | 477.9  |
| 72.5° | 180.1  | 219.3  | 297.8  | 385.2  | 426.2  |
| 75°   | 144.4  | 181.9  | 251.4  | 333.4  | 372.7  |
| 77.5° | 110.6  | 142.6  | 205.1  | 276.4  | 301.3  |
| 80°   | 78.5   | 105.2  | 156.9  | 196.1  | 208.6  |
| 82.5° | 49.9   | 71.3   | 98.1   | 121.3  | 121.3  |
| 85°   | 28.5   | 39.2   | 49.9   | 62.4   | 60.6   |
| 87.5° | 12.5   | 14.3   | 16.0   | 19.6   | 19.6   |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |

(END OF REPORT)