

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: P220108

Luminaire Tested: **R3-WN-2L30-LD5-UNV-22**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P220108
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P35856)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: R3-WN-2L30-LD5-UNV-22
Description: CLASS R3 2X2 RECESSED LED LUMIANIRE
WITH A CLEAR SMOOTH ROUND LENS & NANO-PRISM INLAY
Light Source: (84) 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2445.0 lumens
Efficiency: N/A
Efficacy: 117.5 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 1.28 / 1.37
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

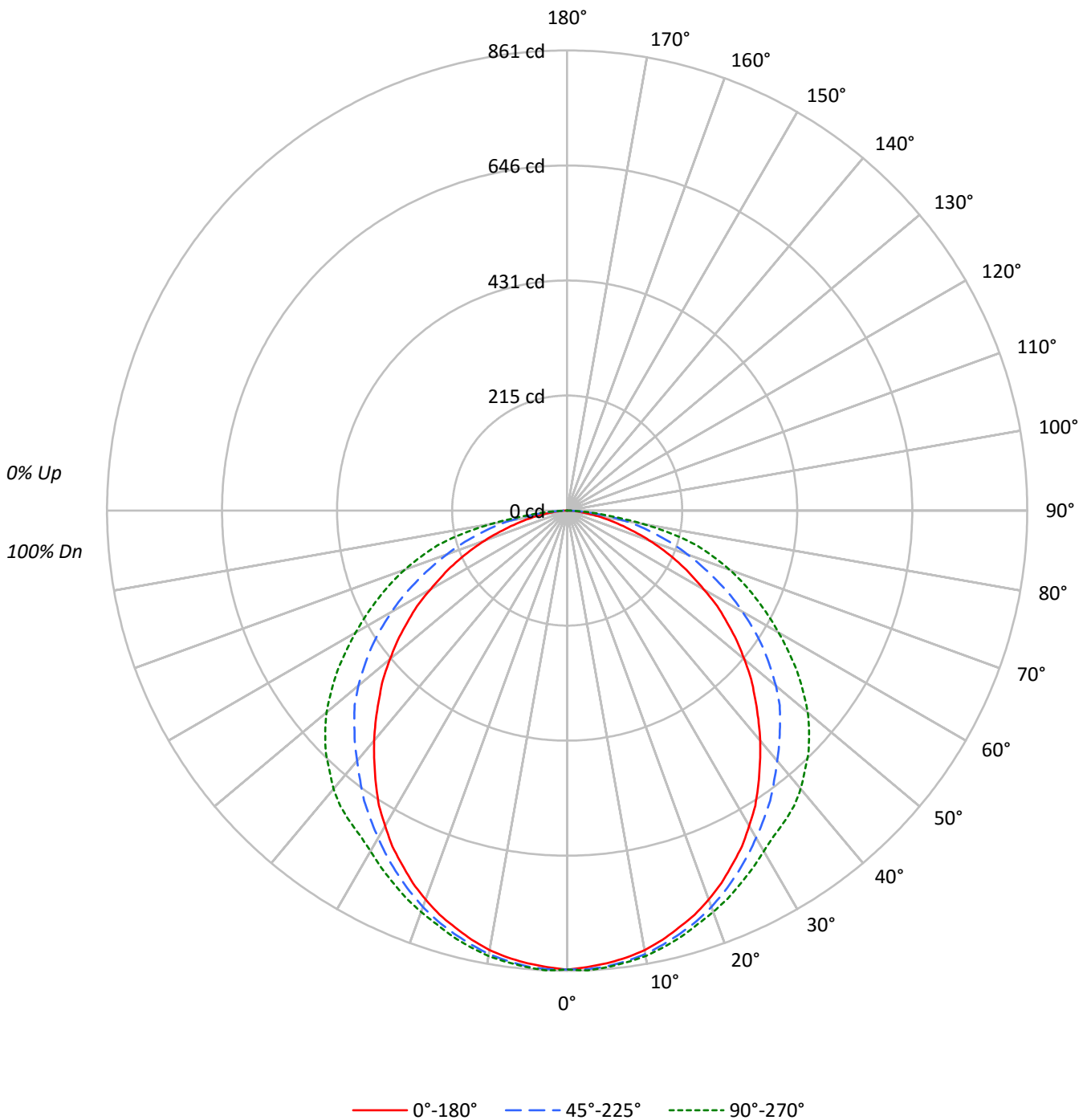
Input Watts (W): 20.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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 | 109 | 104 | 99 | 95 | 106 | 101 | 97 | 94 | 97 | 94 | 91 | 93 | 91 | 88 | 90 | 87 | 85 | 83 |
| 2 | 99 | 90 | 83 | 77 | 96 | 88 | 82 | 76 | 85 | 79 | 75 | 81 | 77 | 73 | 78 | 75 | 71 | 69 |
| 3 | 90 | 79 | 71 | 64 | 87 | 77 | 70 | 64 | 74 | 68 | 62 | 72 | 66 | 61 | 69 | 64 | 60 | 58 |
| 4 | 82 | 70 | 61 | 54 | 80 | 69 | 60 | 54 | 66 | 59 | 53 | 64 | 57 | 52 | 61 | 56 | 52 | 49 |
| 5 | 75 | 62 | 53 | 47 | 73 | 61 | 53 | 46 | 59 | 52 | 46 | 57 | 50 | 45 | 55 | 49 | 45 | 43 |
| 6 | 70 | 56 | 47 | 41 | 68 | 55 | 47 | 40 | 53 | 46 | 40 | 52 | 45 | 40 | 50 | 44 | 39 | 37 |
| 7 | 65 | 51 | 42 | 36 | 63 | 50 | 42 | 36 | 48 | 41 | 35 | 47 | 40 | 35 | 46 | 40 | 35 | 33 |
| 8 | 60 | 46 | 38 | 32 | 58 | 46 | 37 | 32 | 44 | 37 | 32 | 43 | 36 | 31 | 42 | 36 | 31 | 29 |
| 9 | 56 | 43 | 34 | 29 | 55 | 42 | 34 | 29 | 41 | 34 | 28 | 40 | 33 | 28 | 39 | 33 | 28 | 26 |
| 10 | 53 | 39 | 31 | 26 | 51 | 39 | 31 | 26 | 38 | 31 | 26 | 37 | 30 | 26 | 36 | 30 | 26 | 24 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|------|------|------|
| 0° | 2311 | 2311 | 2311 |
| 5° | 2296 | 2313 | 2317 |
| 10° | 2282 | 2303 | 2313 |
| 15° | 2251 | 2282 | 2299 |
| 20° | 2217 | 2260 | 2289 |
| 25° | 2170 | 2229 | 2284 |
| 30° | 2116 | 2197 | 2286 |
| 35° | 2050 | 2176 | 2331 |
| 40° | 1974 | 2148 | 2388 |
| 45° | 1892 | 2143 | 2431 |
| 50° | 1811 | 2133 | 2461 |
| 55° | 1714 | 2099 | 2466 |
| 60° | 1592 | 2040 | 2462 |
| 65° | 1464 | 1962 | 2485 |
| 70° | 1291 | 1888 | 2542 |
| 75° | 1073 | 1797 | 2611 |
| 80° | 848 | 1675 | 2235 |
| 85° | 574 | 1189 | 1497 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 81.2 | 3.3 |
| 10°-20° | 230.8 | 9.4 |
| 20°-30° | 346.0 | 14.2 |
| 30°-40° | 415.7 | 17.0 |
| 40°-50° | 436.4 | 17.8 |
| 50°-60° | 398.1 | 16.3 |
| 60°-70° | 306.7 | 12.5 |
| 70°-80° | 184.5 | 7.5 |
| 80°-90° | 45.7 | 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° | 657.9 | 26.9 |
| 0°-40° | 1073.6 | 43.9 |
| 0°-60° | 1908.1 | 78.0 |
| 0°-90° | 2445.0 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 2445.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|-----|-------|-----|-------|-----|------|
| 0° | 859 | 859 | 859 | 859 | 859 | |
| 5° | 850 | 853 | 856 | 858 | 858 | 81 |
| 15° | 808 | 812 | 819 | 824 | 825 | 228 |
| 25° | 731 | 737 | 751 | 764 | 769 | 337 |
| 35° | 624 | 634 | 662 | 694 | 710 | 390 |
| 45° | 497 | 513 | 563 | 616 | 639 | 384 |
| 55° | 365 | 389 | 447 | 503 | 526 | 327 |
| 65° | 230 | 255 | 308 | 365 | 390 | 227 |
| 75° | 103 | 128 | 173 | 226 | 251 | 111 |
| 85° | 19 | 27 | 38 | 45 | 48 | 24 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P220108

CATALOG NUMBER: R3-WN-2L30-LD5-UNV-22

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|-------|-------|-------|-------|-------|
| 0° | 858.8 | 858.8 | 858.8 | 858.8 | 858.8 |
| 2.5° | 855.1 | 856.3 | 858.8 | 861.3 | 861.3 |
| 5° | 850.1 | 852.6 | 856.3 | 857.6 | 857.6 |
| 7.5° | 843.9 | 846.4 | 850.1 | 852.6 | 852.6 |
| 10° | 835.2 | 836.5 | 842.7 | 845.2 | 846.4 |
| 12.5° | 822.8 | 826.5 | 831.5 | 836.5 | 836.5 |
| 15° | 807.9 | 811.6 | 819.1 | 824.0 | 825.3 |
| 17.5° | 793.0 | 796.7 | 805.4 | 811.6 | 811.6 |
| 20° | 774.3 | 779.3 | 789.2 | 796.7 | 799.2 |
| 22.5° | 754.4 | 759.4 | 770.6 | 780.5 | 785.5 |
| 25° | 730.8 | 737.0 | 750.7 | 764.4 | 769.3 |
| 27.5° | 708.4 | 713.4 | 729.6 | 748.2 | 753.2 |
| 30° | 681.1 | 688.5 | 707.2 | 728.3 | 735.8 |
| 32.5° | 655.0 | 662.4 | 684.8 | 709.7 | 720.9 |
| 35° | 623.9 | 633.9 | 662.4 | 693.5 | 709.7 |
| 37.5° | 592.8 | 604.0 | 636.3 | 677.4 | 697.2 |
| 40° | 561.8 | 574.2 | 611.5 | 662.4 | 679.8 |
| 42.5° | 529.5 | 544.4 | 587.9 | 641.3 | 658.7 |
| 45° | 497.1 | 513.3 | 563.0 | 616.5 | 638.8 |
| 47.5° | 467.3 | 483.5 | 539.4 | 592.8 | 614.0 |
| 50° | 432.5 | 452.4 | 509.6 | 566.7 | 587.9 |
| 52.5° | 400.2 | 418.8 | 478.5 | 535.7 | 556.8 |
| 55° | 365.4 | 389.0 | 447.4 | 503.4 | 525.7 |
| 57.5° | 333.1 | 354.2 | 413.9 | 468.6 | 490.9 |
| 60° | 295.8 | 320.7 | 379.1 | 433.8 | 457.4 |
| 62.5° | 262.2 | 287.1 | 345.5 | 399.0 | 423.8 |
| 65° | 229.9 | 254.8 | 308.2 | 365.4 | 390.3 |
| 67.5° | 196.4 | 222.5 | 273.4 | 331.8 | 357.9 |
| 70° | 164.1 | 187.7 | 239.9 | 297.0 | 323.1 |
| 72.5° | 131.7 | 156.6 | 206.3 | 262.2 | 287.1 |
| 75° | 103.2 | 128.0 | 172.8 | 226.2 | 251.1 |
| 77.5° | 78.3 | 98.2 | 141.7 | 186.4 | 201.3 |
| 80° | 54.7 | 73.3 | 108.1 | 138.0 | 144.2 |
| 82.5° | 34.8 | 49.7 | 70.8 | 87.0 | 85.8 |
| 85° | 18.6 | 27.3 | 38.5 | 44.7 | 48.5 |
| 87.5° | 8.7 | 9.9 | 12.4 | 16.2 | 17.4 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)