

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: METALUX

Report Number: P197377

Luminaire Tested: **8WSL-LD2-100-UNV-L830-CD2-U**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P197377
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P28104)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 8WSL-LD2-100-UNV-L830-CD2-U
Description: 8FT. Linear Wavestream System, L830
Light Source: (476) 3000K CCT, 80 CRI LEDS
EL236N0119D830
Ballast/Driver: OSRAM
OT50W

Summary

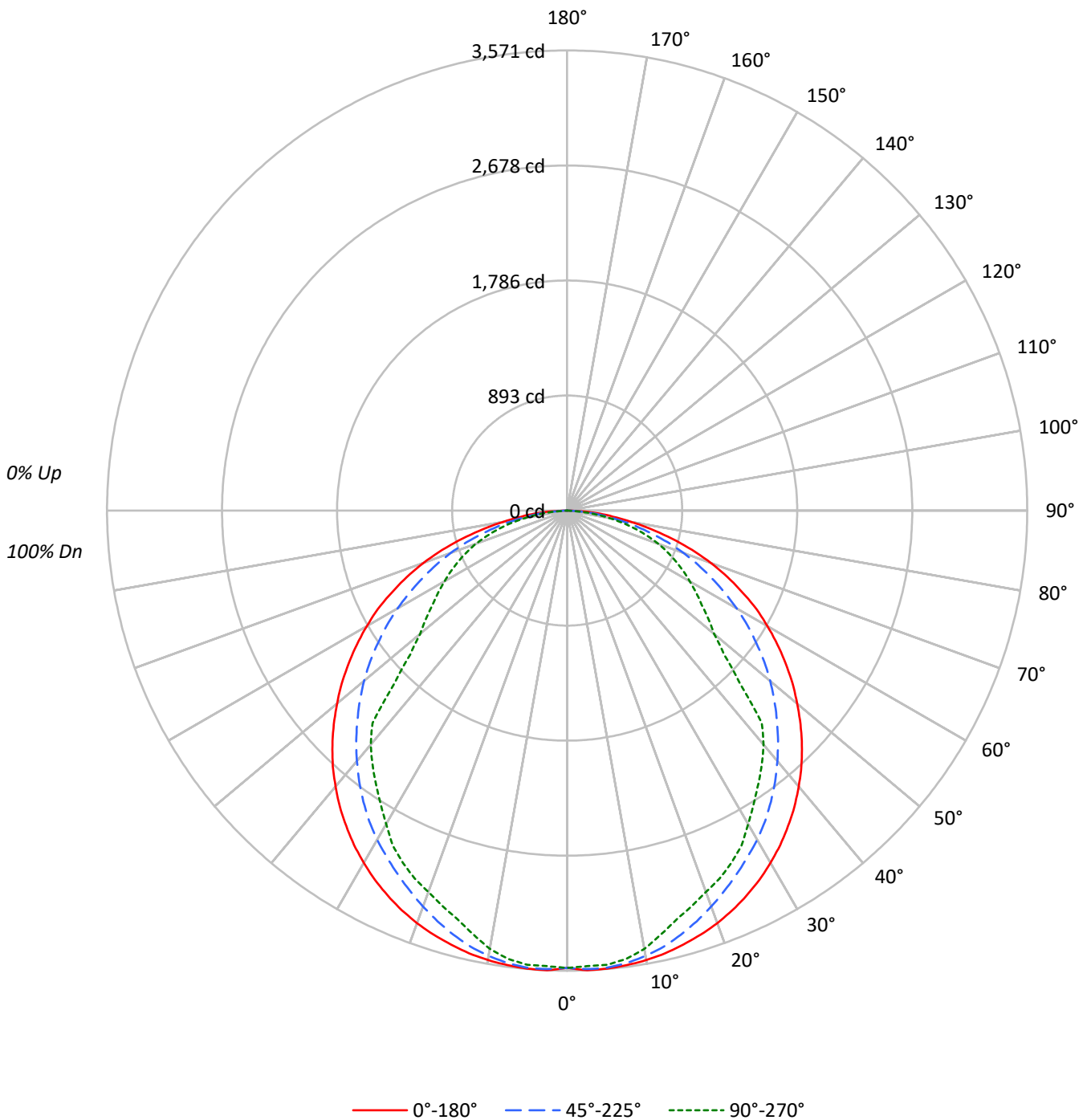
Lumens per Lamp: N/A
Luminaire Lumens: 9885.1 lumens
Efficiency: N/A
Efficacy: 109.1 lumens/watt
Spacing Criteria (0/90/45): 1.32 / 1.18 / 1.35
Luminous Opening: Rectangular (W 0.5' x L: 7.6' x H: 0')
CIE Type: Direct

Input Watts (W): 90.6
Input Voltage (V): NR
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 | 100 | 96 | 106 | 102 | 98 | 94 | 97 | 94 | 91 | 93 | 91 | 88 | 90 | 88 | 86 | 84 |
| 2 | 99 | 90 | 84 | 78 | 96 | 89 | 82 | 77 | 85 | 80 | 75 | 82 | 77 | 73 | 79 | 75 | 72 | 70 |
| 3 | 90 | 79 | 71 | 65 | 88 | 78 | 70 | 64 | 75 | 68 | 63 | 72 | 67 | 62 | 70 | 65 | 61 | 59 |
| 4 | 82 | 70 | 62 | 55 | 80 | 69 | 61 | 54 | 67 | 59 | 54 | 64 | 58 | 53 | 62 | 57 | 52 | 50 |
| 5 | 76 | 63 | 54 | 47 | 74 | 62 | 53 | 47 | 60 | 52 | 46 | 58 | 51 | 46 | 56 | 50 | 45 | 43 |
| 6 | 70 | 57 | 48 | 41 | 68 | 56 | 47 | 41 | 54 | 46 | 41 | 52 | 45 | 40 | 51 | 45 | 40 | 38 |
| 7 | 65 | 51 | 43 | 36 | 63 | 51 | 42 | 36 | 49 | 42 | 36 | 48 | 41 | 36 | 46 | 40 | 35 | 33 |
| 8 | 60 | 47 | 38 | 33 | 59 | 46 | 38 | 32 | 45 | 37 | 32 | 44 | 37 | 32 | 42 | 36 | 32 | 30 |
| 9 | 57 | 43 | 35 | 29 | 55 | 42 | 35 | 29 | 41 | 34 | 29 | 40 | 34 | 29 | 39 | 33 | 29 | 27 |
| 10 | 53 | 40 | 32 | 27 | 52 | 39 | 32 | 26 | 38 | 31 | 26 | 37 | 31 | 26 | 36 | 30 | 26 | 24 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|-------|-------|-------|
| 0° | 10051 | 10051 | 10051 |
| 5° | 10145 | 10126 | 10061 |
| 10° | 10187 | 10093 | 9933 |
| 15° | 10223 | 9993 | 9628 |
| 20° | 10272 | 9858 | 9493 |
| 25° | 10303 | 9730 | 9424 |
| 30° | 10322 | 9648 | 9188 |
| 35° | 10336 | 9533 | 8945 |
| 40° | 10339 | 9384 | 8767 |
| 45° | 10323 | 9223 | 7585 |
| 50° | 10275 | 9065 | 6571 |
| 55° | 10223 | 8850 | 6299 |
| 60° | 10171 | 8596 | 6225 |
| 65° | 10039 | 8286 | 6225 |
| 70° | 9832 | 7963 | 6230 |
| 75° | 9199 | 7337 | 6049 |
| 80° | 8215 | 6349 | 5388 |
| 85° | 7547 | 4888 | 3933 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 337.1 | 3.4 |
| 10°-20° | 956.6 | 9.7 |
| 20°-30° | 1442.0 | 14.6 |
| 30°-40° | 1731.4 | 17.5 |
| 40°-50° | 1763.4 | 17.8 |
| 50°-60° | 1547.5 | 15.7 |
| 60°-70° | 1203.8 | 12.2 |
| 70°-80° | 716.0 | 7.2 |
| 80°-90° | 187.4 | 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° | 2735.7 | 27.7 |
| 0°-40° | 4467.1 | 45.2 |
| 0°-60° | 7777.9 | 78.7 |
| 0°-90° | 9885.1 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 9885.1 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|------|-------|------|-------|------|------|
| 0° | 3548 | 3548 | 3548 | 3548 | 3548 | |
| 5° | 3568 | 3535 | 3561 | 3548 | 3538 | 340 |
| 15° | 3486 | 3437 | 3408 | 3323 | 3283 | 985 |
| 25° | 3296 | 3221 | 3113 | 3032 | 3015 | 1520 |
| 35° | 2989 | 2894 | 2757 | 2626 | 2587 | 1871 |
| 45° | 2577 | 2492 | 2302 | 2126 | 1894 | 1987 |
| 55° | 2070 | 2008 | 1792 | 1436 | 1275 | 1851 |
| 65° | 1498 | 1439 | 1236 | 974 | 929 | 1484 |
| 75° | 840 | 798 | 670 | 543 | 553 | 889 |
| 85° | 232 | 206 | 150 | 121 | 121 | 254 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P197377

CATALOG NUMBER: 8WSL-LD2-100-UNV-L830-CD2-U

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|--------|--------|--------|--------|--------|
| 0° | 3548.2 | 3548.2 | 3548.2 | 3548.2 | 3548.2 |
| 2.5° | 3571.1 | 3535.1 | 3561.3 | 3554.8 | 3538.4 |
| 5° | 3567.9 | 3535.1 | 3561.3 | 3548.2 | 3538.4 |
| 7.5° | 3558.0 | 3525.3 | 3541.7 | 3522.1 | 3509.0 |
| 10° | 3541.7 | 3505.7 | 3509.0 | 3476.3 | 3453.4 |
| 12.5° | 3518.8 | 3476.3 | 3466.5 | 3401.1 | 3368.4 |
| 15° | 3486.1 | 3437.0 | 3407.6 | 3322.6 | 3283.3 |
| 17.5° | 3450.1 | 3394.5 | 3342.2 | 3247.4 | 3217.9 |
| 20° | 3407.6 | 3342.2 | 3270.3 | 3172.2 | 3149.3 |
| 22.5° | 3355.3 | 3286.6 | 3191.8 | 3103.5 | 3090.4 |
| 25° | 3296.4 | 3221.2 | 3113.3 | 3031.5 | 3015.2 |
| 27.5° | 3231.0 | 3142.7 | 3031.5 | 2949.8 | 2930.2 |
| 30° | 3155.8 | 3064.2 | 2949.8 | 2854.9 | 2809.2 |
| 32.5° | 3077.3 | 2982.5 | 2858.2 | 2737.2 | 2694.7 |
| 35° | 2989.0 | 2894.2 | 2756.8 | 2626.0 | 2586.8 |
| 37.5° | 2897.4 | 2799.3 | 2652.2 | 2514.8 | 2482.1 |
| 40° | 2796.1 | 2701.2 | 2537.7 | 2403.6 | 2370.9 |
| 42.5° | 2691.4 | 2599.9 | 2423.3 | 2289.2 | 2236.9 |
| 45° | 2577.0 | 2491.9 | 2302.3 | 2125.7 | 1893.5 |
| 47.5° | 2456.0 | 2377.5 | 2181.3 | 1919.6 | 1651.5 |
| 50° | 2331.7 | 2259.7 | 2057.0 | 1736.5 | 1491.2 |
| 52.5° | 2204.2 | 2138.7 | 1929.5 | 1576.3 | 1380.0 |
| 55° | 2070.1 | 2007.9 | 1792.1 | 1435.6 | 1275.4 |
| 57.5° | 1936.0 | 1873.9 | 1661.3 | 1308.1 | 1187.1 |
| 60° | 1795.4 | 1736.5 | 1517.4 | 1190.4 | 1098.8 |
| 62.5° | 1658.0 | 1592.6 | 1376.8 | 1082.5 | 1017.1 |
| 65° | 1497.8 | 1438.9 | 1236.2 | 974.5 | 928.8 |
| 67.5° | 1347.3 | 1285.2 | 1098.8 | 869.9 | 843.7 |
| 70° | 1187.1 | 1125.0 | 961.5 | 762.0 | 752.2 |
| 72.5° | 1017.1 | 968.0 | 817.6 | 657.3 | 650.8 |
| 75° | 840.5 | 797.9 | 670.4 | 542.9 | 552.7 |
| 77.5° | 667.1 | 641.0 | 529.8 | 434.9 | 441.5 |
| 80° | 503.6 | 484.0 | 389.2 | 323.8 | 330.3 |
| 82.5° | 359.7 | 343.4 | 264.9 | 215.8 | 215.8 |
| 85° | 232.2 | 206.0 | 150.4 | 121.0 | 121.0 |
| 87.5° | 91.6 | 75.2 | 45.8 | 13.1 | 6.5 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)