

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: P#

Luminaire Tested: **2SNLED-LD5-32HL-SLN-UNV-L930-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P#
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P27402)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 2SNLED-LD5-32HL-SLN-UNV-L930-CD1-U
Description: 2FT LINEAR SNLED LED FIXTURE
SQUARE NARROW LENS
Light Source: -
Ballast/Driver: -

Summary

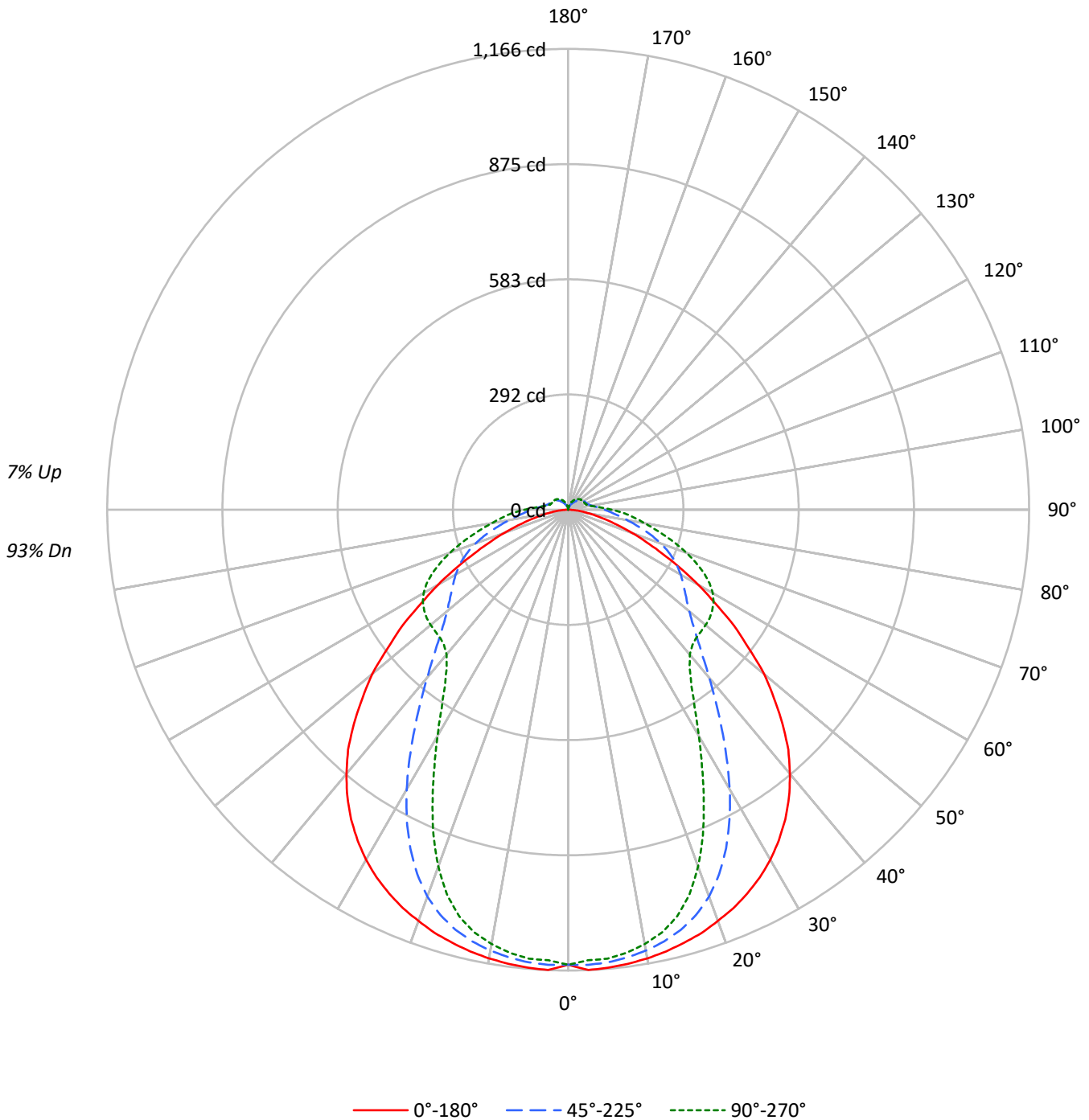
Lumens per Lamp: N/A
Luminaire Lumens: 2894.9 lumens
Efficiency: N/A
Efficacy: 107.2 lumens/watt
Spacing Criteria (0/90/45): 1.31 / 0.96 / 1.11
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 2' x H: 0.12')
CIE Type: Direct

Input Watts (W): 27
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





TEST NUMBER: P#

CATALOG NUMBER: 2SNLED-LD5-32HL-SLN-UNV-L930-CD1-U

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 | 117 | 117 | 117 | 117 | 114 | 114 | 114 | 114 | 107 | 107 | 107 | 101 | 101 | 101 | 95 | 95 | 95 | 93 |
| 1 | 107 | 102 | 97 | 93 | 103 | 99 | 94 | 91 | 93 | 90 | 87 | 88 | 85 | 83 | 83 | 81 | 79 | 76 |
| 2 | 97 | 89 | 82 | 76 | 94 | 86 | 80 | 75 | 81 | 76 | 72 | 77 | 73 | 69 | 73 | 70 | 66 | 64 |
| 3 | 89 | 78 | 70 | 64 | 86 | 76 | 69 | 63 | 72 | 66 | 61 | 68 | 63 | 59 | 65 | 61 | 57 | 54 |
| 4 | 82 | 70 | 61 | 55 | 79 | 68 | 60 | 54 | 65 | 58 | 52 | 61 | 55 | 51 | 58 | 53 | 49 | 47 |
| 5 | 75 | 63 | 54 | 47 | 73 | 61 | 53 | 47 | 58 | 51 | 46 | 55 | 49 | 44 | 53 | 48 | 43 | 41 |
| 6 | 70 | 57 | 48 | 42 | 67 | 55 | 47 | 41 | 53 | 46 | 40 | 51 | 44 | 39 | 48 | 43 | 39 | 36 |
| 7 | 65 | 52 | 43 | 37 | 63 | 51 | 42 | 37 | 48 | 41 | 36 | 46 | 40 | 35 | 44 | 39 | 35 | 32 |
| 8 | 61 | 47 | 39 | 33 | 59 | 46 | 39 | 33 | 44 | 37 | 32 | 43 | 36 | 32 | 41 | 35 | 31 | 29 |
| 9 | 57 | 44 | 36 | 30 | 55 | 43 | 35 | 30 | 41 | 34 | 29 | 40 | 33 | 29 | 38 | 33 | 28 | 27 |
| 10 | 53 | 40 | 33 | 28 | 52 | 40 | 32 | 27 | 38 | 32 | 27 | 37 | 31 | 27 | 35 | 30 | 26 | 24 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|-------|-------|-------|
| 0° | 18606 | 18606 | 18606 |
| 5° | 18769 | 18161 | 17910 |
| 10° | 18711 | 17627 | 17172 |
| 15° | 18665 | 17005 | 16193 |
| 20° | 18618 | 16100 | 14543 |
| 25° | 18568 | 14726 | 12316 |
| 30° | 18419 | 12935 | 10129 |
| 35° | 18092 | 10984 | 8488 |
| 40° | 17491 | 9283 | 7674 |
| 45° | 16487 | 8051 | 7616 |
| 50° | 15150 | 7341 | 7883 |
| 55° | 13253 | 7038 | 8159 |
| 60° | 11089 | 6916 | 8270 |
| 65° | 8825 | 6738 | 8013 |
| 70° | 6981 | 6360 | 7391 |
| 75° | 5144 | 5724 | 6557 |
| 80° | 3642 | 5103 | 5833 |
| 85° | 2217 | 4764 | 5366 |



TEST NUMBER: P#

CATALOG NUMBER: 2SNLED-LD5-32HL-SLN-UNV-L930-CD1-U

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 108.9 | 3.8 |
| 10°-20° | 307.8 | 10.6 |
| 20°-30° | 430.3 | 14.9 |
| 30°-40° | 446.4 | 15.4 |
| 40°-50° | 412.4 | 14.2 |
| 50°-60° | 368.2 | 12.7 |
| 60°-70° | 298.4 | 10.3 |
| 70°-80° | 198.5 | 6.9 |
| 80°-90° | 113.6 | 3.9 |
| 90°-100° | 62.9 | 2.2 |
| 100°-110° | 42.6 | 1.5 |
| 110°-120° | 35.4 | 1.2 |
| 120°-130° | 28.8 | 1.0 |
| 130°-140° | 20.8 | 0.7 |
| 140°-150° | 12.5 | 0.4 |
| 150°-160° | 6.0 | 0.2 |
| 160°-170° | 1.6 | 0.1 |
| 170°-180° | 0.0 | 0.0 |
| 0°-30° | 847.1 | 29.3 |
| 0°-40° | 1293.4 | 44.7 |
| 0°-60° | 2073.9 | 71.6 |
| 0°-90° | 2684.4 | 92.7 |
| 90°-120° | 140.8 | 4.9 |
| 90°-150° | 202.9 | 7.0 |
| 90°-180° | 211.0 | 7.3 |
| 0°-180° | 2894.9 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|------|-------|------|-------|------|------|
| 0° | 1151 | 1151 | 1151 | 1151 | 1151 | |
| 5° | 1163 | 1144 | 1150 | 1142 | 1140 | 111 |
| 15° | 1134 | 1110 | 1101 | 1076 | 1065 | 320 |
| 25° | 1072 | 1024 | 945 | 846 | 812 | 494 |
| 35° | 957 | 852 | 677 | 569 | 543 | 597 |
| 45° | 766 | 607 | 461 | 445 | 458 | 589 |
| 55° | 512 | 387 | 360 | 419 | 445 | 456 |
| 65° | 262 | 234 | 293 | 359 | 378 | 264 |
| 75° | 102 | 127 | 198 | 242 | 252 | 111 |
| 85° | 20 | 59 | 117 | 149 | 153 | 24 |
| 90° | 1 | 42 | 92 | 111 | 110 | 2 |
| 95° | 1 | 35 | 73 | 78 | 76 | 1 |
| 105° | 0 | 30 | 52 | 51 | 48 | 1 |
| 115° | 0 | 28 | 46 | 46 | 44 | 0 |
| 125° | 0 | 24 | 41 | 43 | 42 | 1 |
| 135° | 1 | 18 | 32 | 38 | 38 | 1 |
| 145° | 1 | 11 | 22 | 30 | 32 | 1 |
| 155° | 1 | 7 | 14 | 18 | 22 | 0 |
| 165° | 1 | 4 | 7 | 9 | 12 | 0 |
| 175° | 0 | 0 | 0 | 0 | 0 | 0 |
| 180° | 0 | 0 | 0 | 0 | 0 | 0 |



TEST NUMBER: P#

CATALOG NUMBER: 2SNLED-LD5-32HL-SLN-UNV-L930-CD1-U

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|--------|--------|--------|--------|--------|
| 0° | 1151.2 | 1151.2 | 1151.2 | 1151.2 | 1151.2 |
| 2.5° | 1165.7 | 1146.7 | 1152.7 | 1147.7 | 1141.2 |
| 5° | 1163.2 | 1143.7 | 1149.7 | 1141.7 | 1140.2 |
| 7.5° | 1158.7 | 1139.2 | 1142.7 | 1133.2 | 1130.7 |
| 10° | 1152.7 | 1132.2 | 1132.7 | 1119.1 | 1115.6 |
| 12.5° | 1144.7 | 1122.2 | 1119.1 | 1100.6 | 1095.6 |
| 15° | 1134.2 | 1110.1 | 1100.6 | 1075.6 | 1065.1 |
| 17.5° | 1122.7 | 1094.6 | 1075.1 | 1036.6 | 1020.1 |
| 20° | 1107.1 | 1075.6 | 1041.6 | 983.1 | 961.1 |
| 22.5° | 1091.6 | 1052.6 | 998.1 | 920.0 | 890.5 |
| 25° | 1071.6 | 1024.1 | 945.0 | 846.0 | 811.5 |
| 27.5° | 1049.1 | 990.6 | 884.0 | 769.9 | 732.9 |
| 30° | 1022.6 | 950.1 | 817.0 | 695.4 | 660.4 |
| 32.5° | 991.6 | 904.5 | 746.4 | 628.4 | 595.8 |
| 35° | 957.1 | 852.0 | 677.4 | 568.8 | 543.3 |
| 37.5° | 917.5 | 794.5 | 613.4 | 520.8 | 504.3 |
| 40° | 872.5 | 731.9 | 554.3 | 483.8 | 478.3 |
| 42.5° | 824.0 | 670.9 | 503.8 | 459.8 | 464.8 |
| 45° | 766.4 | 607.4 | 461.3 | 444.8 | 458.3 |
| 47.5° | 705.9 | 545.3 | 426.7 | 436.3 | 455.8 |
| 50° | 647.4 | 487.8 | 399.7 | 430.7 | 453.8 |
| 52.5° | 574.8 | 436.3 | 378.2 | 425.7 | 450.8 |
| 55° | 512.3 | 387.2 | 360.2 | 418.7 | 444.8 |
| 57.5° | 440.3 | 343.2 | 344.2 | 409.7 | 435.8 |
| 60° | 380.2 | 303.2 | 328.7 | 397.2 | 422.2 |
| 62.5° | 319.2 | 267.2 | 311.7 | 380.7 | 403.2 |
| 65° | 261.7 | 234.1 | 293.2 | 359.2 | 378.2 |
| 67.5° | 213.6 | 204.1 | 272.2 | 333.2 | 349.2 |
| 70° | 173.1 | 176.6 | 249.1 | 304.2 | 317.7 |
| 72.5° | 133.1 | 151.1 | 224.1 | 273.2 | 284.7 |
| 75° | 101.6 | 127.1 | 197.6 | 242.1 | 252.1 |
| 77.5° | 75.0 | 106.1 | 173.6 | 214.1 | 222.6 |
| 80° | 53.0 | 87.6 | 151.1 | 189.6 | 196.1 |
| 82.5° | 35.5 | 72.0 | 132.6 | 167.6 | 173.6 |
| 85° | 20.5 | 59.0 | 116.6 | 149.1 | 153.1 |
| 87.5° | 8.5 | 49.0 | 103.6 | 130.1 | 132.1 |
| 90° | 1.0 | 41.5 | 92.1 | 111.1 | 110.1 |
| 92.5° | 1.0 | 37.5 | 82.0 | 93.1 | 90.6 |
| 95° | 1.0 | 35.0 | 73.0 | 78.0 | 75.5 |
| 97.5° | 1.0 | 33.5 | 65.0 | 67.0 | 64.5 |
| 100° | 0.5 | 32.5 | 59.5 | 59.5 | 57.0 |
| 102.5° | 0.5 | 31.5 | 55.5 | 54.0 | 52.0 |
| 105° | 0.5 | 30.5 | 52.5 | 51.0 | 48.5 |
| 107.5° | 0.5 | 30.0 | 50.5 | 49.0 | 46.5 |
| 110° | 0.5 | 29.0 | 49.0 | 47.5 | 45.5 |



TEST NUMBER: P#

CATALOG NUMBER: 2SNLED-LD5-32HL-SLN-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|-----|-------|------|-------|------|
| 112.5° | 0.5 | 28.5 | 48.0 | 47.0 | 44.5 |
| 115° | 0.5 | 27.5 | 46.5 | 46.0 | 44.5 |
| 117.5° | 0.5 | 26.5 | 45.5 | 45.5 | 44.0 |
| 120° | 0.5 | 25.5 | 44.0 | 45.0 | 43.5 |
| 122.5° | 0.5 | 24.5 | 42.5 | 44.0 | 42.5 |
| 125° | 0.5 | 23.5 | 41.0 | 43.0 | 42.0 |
| 127.5° | 1.0 | 22.0 | 39.0 | 42.0 | 41.0 |
| 130° | 0.5 | 20.5 | 37.0 | 41.0 | 40.5 |
| 132.5° | 1.0 | 19.0 | 35.0 | 39.5 | 39.5 |
| 135° | 1.0 | 17.5 | 32.5 | 38.0 | 38.0 |
| 137.5° | 1.0 | 15.5 | 30.0 | 36.0 | 36.5 |
| 140° | 1.0 | 14.0 | 27.5 | 34.0 | 35.0 |
| 142.5° | 1.0 | 12.5 | 25.0 | 32.0 | 33.5 |
| 145° | 1.0 | 11.0 | 22.5 | 29.5 | 31.5 |
| 147.5° | 1.0 | 10.0 | 20.0 | 26.5 | 29.5 |
| 150° | 1.0 | 8.5 | 18.0 | 24.0 | 27.0 |
| 152.5° | 1.0 | 7.5 | 16.0 | 21.5 | 25.0 |
| 155° | 1.0 | 7.0 | 14.0 | 18.5 | 22.5 |
| 157.5° | 1.0 | 6.0 | 12.0 | 16.0 | 20.0 |
| 160° | 1.0 | 5.0 | 10.0 | 14.0 | 17.0 |
| 162.5° | 1.0 | 4.5 | 8.5 | 11.5 | 15.0 |
| 165° | 1.0 | 4.0 | 7.0 | 9.0 | 12.0 |
| 167.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 170° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 172.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 175° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 177.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 180° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)