

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: **4SNLED-LD5-30SL-SLC-UNV-L950-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 (P27404)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 4SNLED-LD5-30SL-SLC-UNV-L950-CD1-U
Description: 4FT LINEAR SNLED LED FIXTURE
CLEAR SQUARE LENS
Light Source: -
Ballast/Driver: -

Summary

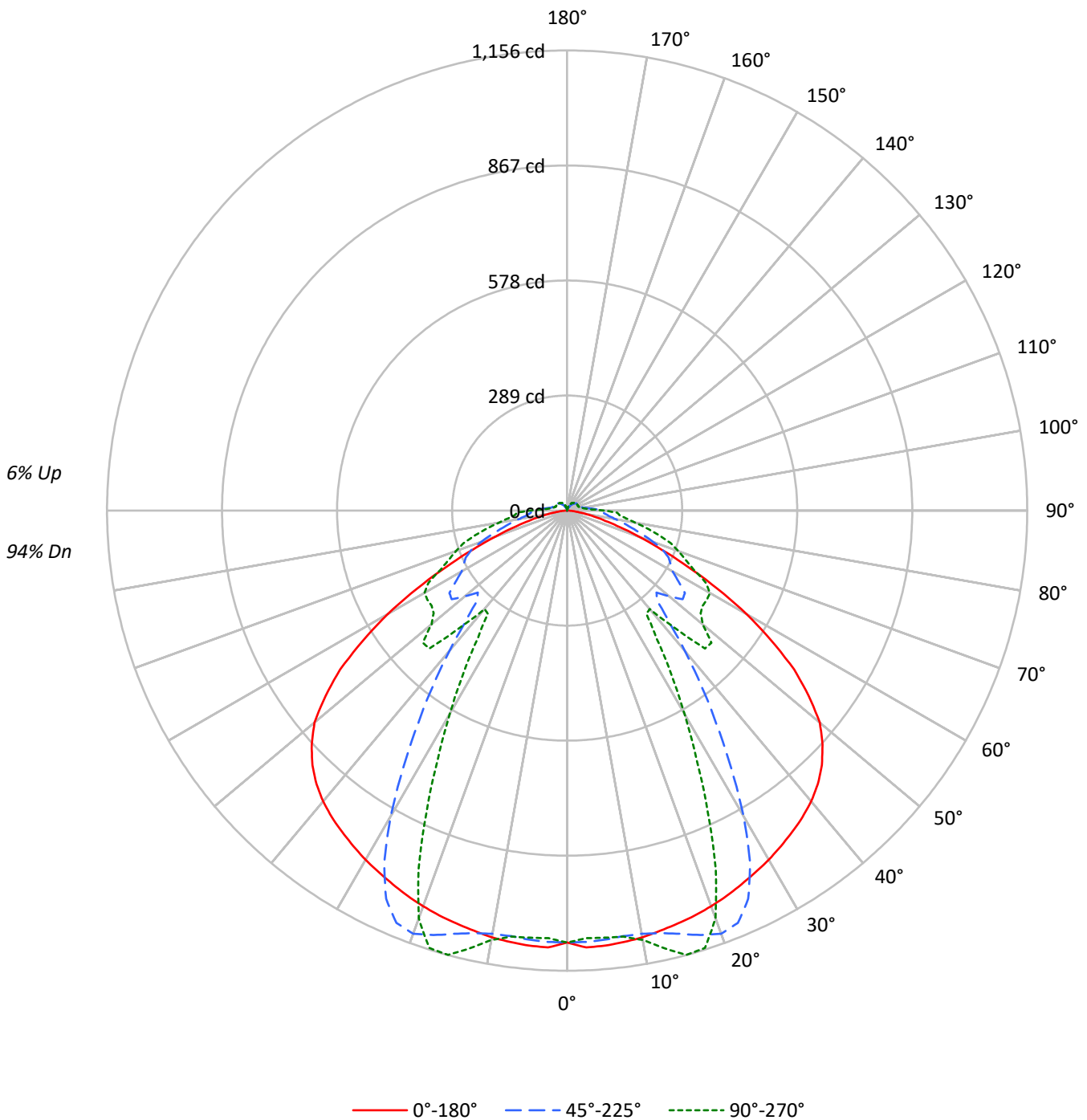
Lumens per Lamp: N/A
Luminaire Lumens: 2787.0 lumens
Efficiency: N/A
Efficacy: 132.7 lumens/watt
Spacing Criteria (0/90/45): 1.4 / 1 / 1.08
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.12')
CIE Type: Direct

Input Watts (W): 21
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



TEST NUMBER: P#
CATALOG NUMBER: 4SNLED-LD5-30SL-SLC-UNV-L950-CD1-U

Luminous Intensity Polar Plot





TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-30SL-SLC-UNV-L950-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 | 118 | 118 | 118 | 118 | 114 | 114 | 114 | 114 | 108 | 108 | 108 | 102 | 102 | 102 | 97 | 97 | 97 | 94 |
| 1 | 107 | 102 | 98 | 94 | 104 | 99 | 95 | 92 | 94 | 91 | 88 | 89 | 87 | 84 | 85 | 83 | 81 | 78 |
| 2 | 98 | 90 | 83 | 77 | 95 | 87 | 81 | 76 | 83 | 78 | 73 | 79 | 74 | 71 | 75 | 71 | 68 | 66 |
| 3 | 89 | 79 | 71 | 65 | 87 | 77 | 70 | 64 | 73 | 67 | 62 | 70 | 65 | 60 | 67 | 62 | 59 | 56 |
| 4 | 82 | 71 | 62 | 56 | 80 | 69 | 61 | 55 | 66 | 59 | 53 | 63 | 57 | 52 | 60 | 55 | 51 | 49 |
| 5 | 76 | 63 | 55 | 48 | 74 | 62 | 54 | 48 | 59 | 52 | 47 | 57 | 51 | 46 | 54 | 49 | 45 | 43 |
| 6 | 70 | 58 | 49 | 43 | 68 | 56 | 48 | 42 | 54 | 47 | 41 | 52 | 45 | 41 | 50 | 44 | 40 | 38 |
| 7 | 66 | 52 | 44 | 38 | 64 | 51 | 43 | 38 | 49 | 42 | 37 | 47 | 41 | 36 | 46 | 40 | 36 | 34 |
| 8 | 61 | 48 | 40 | 34 | 59 | 47 | 39 | 34 | 45 | 38 | 33 | 44 | 37 | 33 | 42 | 37 | 32 | 30 |
| 9 | 57 | 44 | 36 | 31 | 56 | 44 | 36 | 31 | 42 | 35 | 30 | 41 | 34 | 30 | 39 | 34 | 29 | 28 |
| 10 | 54 | 41 | 33 | 28 | 52 | 40 | 33 | 28 | 39 | 32 | 28 | 38 | 32 | 27 | 37 | 31 | 27 | 25 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|-------|------|------|
| 0° | 8768 | 8768 | 8768 |
| 5° | 8874 | 8562 | 8457 |
| 10° | 8885 | 8432 | 8427 |
| 15° | 8910 | 8551 | 8784 |
| 20° | 8993 | 8806 | 8245 |
| 25° | 9105 | 8462 | 6348 |
| 30° | 9284 | 7087 | 4516 |
| 35° | 9514 | 5368 | 3058 |
| 40° | 9805 | 3902 | 2589 |
| 45° | 10027 | 2831 | 4071 |
| 50° | 10042 | 3135 | 3863 |
| 55° | 9386 | 3608 | 3815 |
| 60° | 7997 | 3300 | 4055 |
| 65° | 6016 | 3328 | 3709 |
| 70° | 4221 | 3031 | 3452 |
| 75° | 2765 | 2539 | 3098 |
| 80° | 1767 | 2176 | 2579 |
| 85° | 950 | 2068 | 2315 |



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-30SL-SLC-UNV-L950-CD1-U

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 103.2 | 3.7 |
| 10°-20° | 311.7 | 11.2 |
| 20°-30° | 452.8 | 16.2 |
| 30°-40° | 432.6 | 15.5 |
| 40°-50° | 395.7 | 14.2 |
| 50°-60° | 365.4 | 13.1 |
| 60°-70° | 290.2 | 10.4 |
| 70°-80° | 179.2 | 6.4 |
| 80°-90° | 97.6 | 3.5 |
| 90°-100° | 49.3 | 1.8 |
| 100°-110° | 31.0 | 1.1 |
| 110°-120° | 26.2 | 0.9 |
| 120°-130° | 21.4 | 0.8 |
| 130°-140° | 15.4 | 0.6 |
| 140°-150° | 9.5 | 0.3 |
| 150°-160° | 4.5 | 0.2 |
| 160°-170° | 1.2 | 0.0 |
| 170°-180° | 0.0 | 0.0 |
| 0°-30° | 867.7 | 31.1 |
| 0°-40° | 1300.4 | 46.7 |
| 0°-60° | 2061.5 | 74.0 |
| 0°-90° | 2628.5 | 94.3 |
| 90°-120° | 106.5 | 3.8 |
| 90°-150° | 152.8 | 5.5 |
| 90°-180° | 159.0 | 5.7 |
| 0°-180° | 2787.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|------|-------|------|-------|------|------|
| 0° | 1085 | 1085 | 1085 | 1085 | 1085 | |
| 5° | 1097 | 1080 | 1082 | 1076 | 1077 | 104 |
| 15° | 1074 | 1060 | 1101 | 1142 | 1156 | 304 |
| 25° | 1036 | 1056 | 1076 | 911 | 837 | 479 |
| 35° | 986 | 970 | 654 | 450 | 391 | 618 |
| 45° | 905 | 631 | 319 | 407 | 490 | 695 |
| 55° | 696 | 324 | 361 | 388 | 416 | 613 |
| 65° | 336 | 210 | 281 | 342 | 350 | 339 |
| 75° | 99 | 112 | 169 | 223 | 238 | 112 |
| 85° | 14 | 48 | 96 | 130 | 132 | 18 |
| 90° | 0 | 36 | 86 | 101 | 94 | 1 |
| 95° | 0 | 33 | 59 | 52 | 50 | 0 |
| 105° | 0 | 30 | 36 | 33 | 33 | 0 |
| 115° | 0 | 24 | 35 | 31 | 30 | 0 |
| 125° | 0 | 20 | 31 | 30 | 29 | 0 |
| 135° | 0 | 14 | 25 | 27 | 26 | 0 |
| 145° | 0 | 9 | 17 | 22 | 24 | 0 |
| 155° | 1 | 5 | 11 | 14 | 17 | 0 |
| 165° | 1 | 3 | 5 | 7 | 9 | 0 |
| 175° | 0 | 0 | 0 | 0 | 0 | 0 |
| 180° | 0 | 0 | 0 | 0 | 0 | 0 |



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-30SL-SLC-UNV-L950-CD1-U

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|--------|--------|--------|--------|--------|
| 0° | 1085.0 | 1085.0 | 1085.0 | 1085.0 | 1085.0 |
| 2.5° | 1098.4 | 1082.6 | 1084.5 | 1081.1 | 1075.3 |
| 5° | 1097.0 | 1080.1 | 1082.1 | 1076.3 | 1076.8 |
| 7.5° | 1093.1 | 1075.8 | 1078.2 | 1077.3 | 1079.7 |
| 10° | 1088.8 | 1070.5 | 1079.7 | 1087.8 | 1095.0 |
| 12.5° | 1081.1 | 1064.8 | 1086.9 | 1110.9 | 1125.8 |
| 15° | 1073.9 | 1059.5 | 1100.8 | 1141.6 | 1155.6 |
| 17.5° | 1066.7 | 1057.6 | 1118.1 | 1153.6 | 1151.7 |
| 20° | 1057.6 | 1056.6 | 1131.1 | 1119.1 | 1089.8 |
| 22.5° | 1047.5 | 1057.1 | 1121.0 | 1033.1 | 975.4 |
| 25° | 1036.0 | 1056.1 | 1076.3 | 911.1 | 836.6 |
| 27.5° | 1024.4 | 1051.8 | 995.1 | 777.6 | 704.1 |
| 30° | 1012.9 | 1040.3 | 885.6 | 655.6 | 588.8 |
| 32.5° | 999.5 | 1015.3 | 766.5 | 547.5 | 486.0 |
| 35° | 985.5 | 969.7 | 653.7 | 450.0 | 391.4 |
| 37.5° | 971.1 | 903.9 | 552.3 | 364.5 | 327.1 |
| 40° | 953.8 | 821.3 | 459.1 | 312.7 | 322.7 |
| 42.5° | 932.2 | 728.1 | 377.0 | 328.0 | 398.2 |
| 45° | 904.8 | 631.1 | 318.9 | 406.8 | 489.9 |
| 47.5° | 870.3 | 537.9 | 304.5 | 465.9 | 491.8 |
| 50° | 828.5 | 452.4 | 334.8 | 446.7 | 444.7 |
| 52.5° | 765.1 | 381.3 | 365.5 | 407.3 | 422.6 |
| 55° | 695.9 | 323.7 | 361.2 | 388.5 | 415.9 |
| 57.5° | 608.5 | 284.8 | 331.4 | 384.7 | 416.4 |
| 60° | 521.6 | 258.9 | 305.9 | 384.2 | 414.0 |
| 62.5° | 425.5 | 235.3 | 293.0 | 375.1 | 392.9 |
| 65° | 335.7 | 209.9 | 281.4 | 342.0 | 350.1 |
| 67.5° | 257.4 | 183.9 | 261.3 | 305.0 | 321.3 |
| 70° | 194.0 | 158.5 | 229.6 | 276.6 | 296.8 |
| 72.5° | 139.8 | 134.5 | 196.9 | 251.7 | 272.8 |
| 75° | 98.9 | 111.9 | 168.6 | 223.3 | 238.2 |
| 77.5° | 68.2 | 91.3 | 144.6 | 192.1 | 204.1 |
| 80° | 44.7 | 73.0 | 123.0 | 165.2 | 173.4 |
| 82.5° | 26.9 | 58.6 | 106.6 | 144.6 | 148.9 |
| 85° | 13.9 | 47.5 | 95.6 | 130.2 | 132.1 |
| 87.5° | 4.3 | 39.9 | 89.3 | 123.4 | 125.8 |
| 90° | 0.5 | 35.5 | 85.5 | 101.3 | 93.7 |
| 92.5° | 0.0 | 33.6 | 74.0 | 69.2 | 62.0 |
| 95° | 0.0 | 33.1 | 59.1 | 52.4 | 49.5 |
| 97.5° | 0.0 | 32.2 | 48.5 | 43.7 | 42.3 |
| 100° | 0.0 | 31.2 | 41.8 | 38.4 | 37.9 |
| 102.5° | 0.0 | 30.7 | 37.9 | 35.1 | 34.6 |
| 105° | 0.0 | 29.8 | 36.5 | 33.1 | 32.7 |
| 107.5° | 0.0 | 28.3 | 35.5 | 32.2 | 31.2 |
| 110° | 0.0 | 26.9 | 35.5 | 31.7 | 30.3 |



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-30SL-SLC-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|-----|-------|------|-------|------|
| 112.5° | 0.0 | 25.5 | 35.5 | 31.2 | 29.8 |
| 115° | 0.0 | 24.5 | 35.1 | 31.2 | 29.8 |
| 117.5° | 0.5 | 23.5 | 34.6 | 31.2 | 29.8 |
| 120° | 0.0 | 22.6 | 33.6 | 31.2 | 29.3 |
| 122.5° | 0.5 | 21.1 | 32.7 | 30.7 | 29.3 |
| 125° | 0.5 | 19.7 | 31.2 | 30.3 | 28.8 |
| 127.5° | 0.5 | 18.3 | 29.8 | 29.3 | 27.9 |
| 130° | 0.5 | 16.8 | 28.3 | 28.8 | 27.4 |
| 132.5° | 0.5 | 15.4 | 26.4 | 27.9 | 26.9 |
| 135° | 0.5 | 13.9 | 25.0 | 27.4 | 26.4 |
| 137.5° | 0.5 | 12.5 | 23.1 | 25.9 | 25.9 |
| 140° | 0.5 | 11.0 | 21.1 | 25.0 | 25.5 |
| 142.5° | 0.5 | 10.1 | 19.2 | 24.0 | 24.5 |
| 145° | 0.5 | 8.6 | 17.3 | 22.1 | 23.5 |
| 147.5° | 0.5 | 7.7 | 15.4 | 20.2 | 22.1 |
| 150° | 0.5 | 6.7 | 13.4 | 18.3 | 20.2 |
| 152.5° | 0.5 | 5.8 | 12.0 | 15.8 | 18.7 |
| 155° | 1.0 | 5.3 | 10.6 | 13.9 | 16.8 |
| 157.5° | 1.0 | 4.3 | 8.6 | 12.0 | 14.4 |
| 160° | 1.0 | 3.8 | 7.7 | 10.1 | 13.0 |
| 162.5° | 1.0 | 3.4 | 6.2 | 8.6 | 11.0 |
| 165° | 1.0 | 2.9 | 5.3 | 6.7 | 9.1 |
| 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)