

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-LD5-56SL-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-LD5-56SL-SLC-UNV-L950-CD1-U
Description: 4FT LINEAR SNLED LED FIXTURE
CLEAR SQUARE LENS
Light Source: -
Ballast/Driver: -

Summary

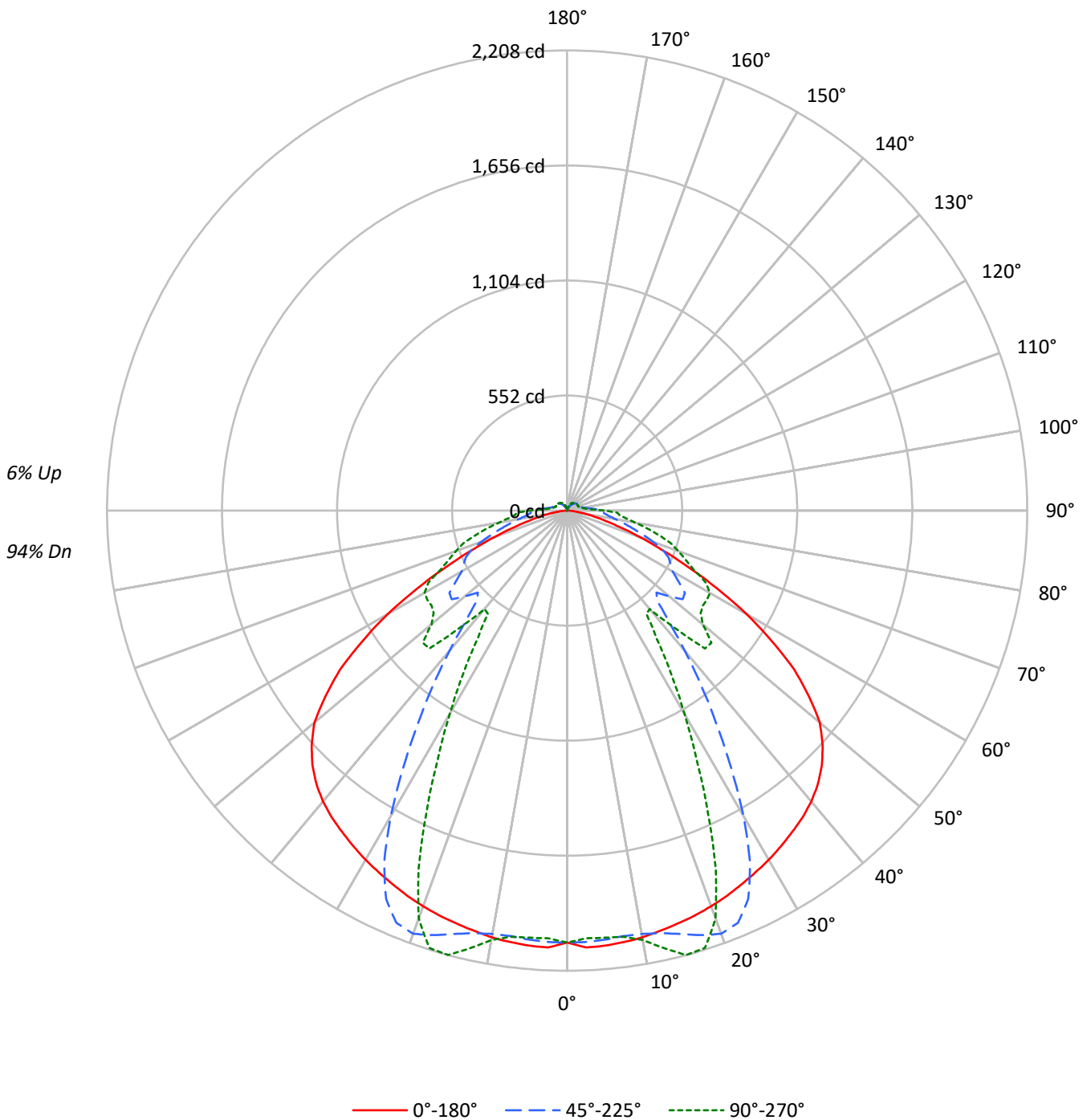
Lumens per Lamp: N/A
Luminaire Lumens: 5324.0 lumens
Efficiency: N/A
Efficacy: 115.7 lumens/watt
Spacing Criteria (0/90/45): 1.4 / 1 / 1.08
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.12')
CIE Type: Direct

Input Watts (W): 46
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-LD5-56SL-SLC-UNV-L950-CD1-U

Luminous Intensity Polar Plot





TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-56SL-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° | 16749 | 16749 | 16749 |
| 5° | 16952 | 16357 | 16156 |
| 10° | 16973 | 16108 | 16099 |
| 15° | 17021 | 16335 | 16780 |
| 20° | 17178 | 16821 | 15751 |
| 25° | 17392 | 16166 | 12127 |
| 30° | 17736 | 13539 | 8626 |
| 35° | 18175 | 10254 | 5841 |
| 40° | 18730 | 7454 | 4946 |
| 45° | 19155 | 5407 | 7776 |
| 50° | 19182 | 5988 | 7380 |
| 55° | 17929 | 6890 | 7287 |
| 60° | 15277 | 6305 | 7746 |
| 65° | 11492 | 6359 | 7085 |
| 70° | 8066 | 5789 | 6595 |
| 75° | 5285 | 4850 | 5918 |
| 80° | 3372 | 4155 | 4926 |
| 85° | 1817 | 3950 | 4422 |



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-56SL-SLC-UNV-L950-CD1-U

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 197.2 | 3.7 |
| 10°-20° | 595.5 | 11.2 |
| 20°-30° | 865.0 | 16.2 |
| 30°-40° | 826.5 | 15.5 |
| 40°-50° | 756.0 | 14.2 |
| 50°-60° | 698.0 | 13.1 |
| 60°-70° | 554.5 | 10.4 |
| 70°-80° | 342.2 | 6.4 |
| 80°-90° | 186.4 | 3.5 |
| 90°-100° | 94.2 | 1.8 |
| 100°-110° | 59.2 | 1.1 |
| 110°-120° | 50.1 | 0.9 |
| 120°-130° | 40.9 | 0.8 |
| 130°-140° | 29.4 | 0.6 |
| 140°-150° | 18.1 | 0.3 |
| 150°-160° | 8.6 | 0.2 |
| 160°-170° | 2.2 | 0.0 |
| 170°-180° | 0.0 | 0.0 |
| 0°-30° | 1657.7 | 31.1 |
| 0°-40° | 2484.1 | 46.7 |
| 0°-60° | 3938.2 | 74.0 |
| 0°-90° | 5021.3 | 94.3 |
| 90°-120° | 203.5 | 3.8 |
| 90°-150° | 291.9 | 5.5 |
| 90°-180° | 303.0 | 5.7 |
| 0°-180° | 5324.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|------|-------|------|-------|------|------|
| 0° | 2073 | 2073 | 2073 | 2073 | 2073 | |
| 5° | 2096 | 2063 | 2067 | 2056 | 2057 | 199 |
| 15° | 2052 | 2024 | 2103 | 2181 | 2208 | 581 |
| 25° | 1979 | 2018 | 2056 | 1740 | 1598 | 915 |
| 35° | 1883 | 1852 | 1249 | 860 | 748 | 1181 |
| 45° | 1728 | 1206 | 609 | 777 | 936 | 1328 |
| 55° | 1329 | 618 | 690 | 742 | 794 | 1171 |
| 65° | 641 | 401 | 538 | 653 | 669 | 649 |
| 75° | 189 | 214 | 322 | 427 | 455 | 214 |
| 85° | 27 | 91 | 183 | 249 | 252 | 34 |
| 90° | 1 | 68 | 163 | 194 | 179 | 1 |
| 95° | 0 | 63 | 113 | 100 | 94 | 0 |
| 105° | 0 | 57 | 70 | 63 | 62 | 0 |
| 115° | 0 | 47 | 67 | 60 | 57 | 0 |
| 125° | 1 | 38 | 60 | 58 | 55 | 1 |
| 135° | 1 | 27 | 48 | 52 | 50 | 1 |
| 145° | 1 | 16 | 33 | 42 | 45 | 1 |
| 155° | 2 | 10 | 20 | 27 | 32 | 1 |
| 165° | 2 | 6 | 10 | 13 | 17 | 0 |
| 175° | 0 | 0 | 0 | 0 | 0 | 0 |
| 180° | 0 | 0 | 0 | 0 | 0 | 0 |



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-56SL-SLC-UNV-L950-CD1-U

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|--------|--------|--------|--------|--------|
| 0° | 2072.6 | 2072.6 | 2072.6 | 2072.6 | 2072.6 |
| 2.5° | 2098.3 | 2068.0 | 2071.7 | 2065.2 | 2054.2 |
| 5° | 2095.5 | 2063.4 | 2067.1 | 2056.1 | 2057.0 |
| 7.5° | 2088.2 | 2055.2 | 2059.7 | 2057.9 | 2062.5 |
| 10° | 2079.9 | 2045.1 | 2062.5 | 2078.1 | 2091.8 |
| 12.5° | 2065.2 | 2034.0 | 2076.3 | 2122.1 | 2150.6 |
| 15° | 2051.5 | 2024.0 | 2102.9 | 2180.8 | 2207.5 |
| 17.5° | 2037.7 | 2020.3 | 2135.9 | 2203.8 | 2200.1 |
| 20° | 2020.3 | 2018.5 | 2160.7 | 2137.7 | 2081.8 |
| 22.5° | 2001.0 | 2019.4 | 2141.4 | 1973.5 | 1863.4 |
| 25° | 1979.0 | 2017.5 | 2056.1 | 1740.5 | 1598.2 |
| 27.5° | 1957.0 | 2009.3 | 1901.0 | 1485.4 | 1345.0 |
| 30° | 1935.0 | 1987.3 | 1691.8 | 1252.4 | 1124.8 |
| 32.5° | 1909.3 | 1939.5 | 1464.3 | 1045.9 | 928.5 |
| 35° | 1882.7 | 1852.4 | 1248.7 | 859.7 | 747.7 |
| 37.5° | 1855.1 | 1726.7 | 1055.1 | 696.4 | 624.8 |
| 40° | 1822.1 | 1568.9 | 877.1 | 597.3 | 616.5 |
| 42.5° | 1780.8 | 1390.9 | 720.2 | 626.6 | 760.6 |
| 45° | 1728.5 | 1205.6 | 609.2 | 777.1 | 935.8 |
| 47.5° | 1662.5 | 1027.6 | 581.7 | 890.0 | 939.5 |
| 50° | 1582.6 | 864.3 | 639.5 | 853.3 | 849.6 |
| 52.5° | 1461.5 | 728.5 | 698.2 | 778.0 | 807.4 |
| 55° | 1329.4 | 618.4 | 689.9 | 742.2 | 794.5 |
| 57.5° | 1162.4 | 544.1 | 633.1 | 734.9 | 795.5 |
| 60° | 996.4 | 494.5 | 584.4 | 734.0 | 790.9 |
| 62.5° | 812.9 | 449.6 | 559.7 | 716.6 | 750.5 |
| 65° | 641.3 | 400.9 | 537.6 | 653.2 | 668.8 |
| 67.5° | 491.8 | 351.4 | 499.1 | 582.6 | 613.8 |
| 70° | 370.7 | 302.8 | 438.6 | 528.5 | 567.0 |
| 72.5° | 267.0 | 256.9 | 376.2 | 480.8 | 521.1 |
| 75° | 189.0 | 213.8 | 322.0 | 426.6 | 455.1 |
| 77.5° | 130.3 | 174.3 | 276.2 | 367.0 | 389.9 |
| 80° | 85.3 | 139.5 | 234.9 | 315.6 | 331.2 |
| 82.5° | 51.4 | 111.9 | 203.7 | 276.2 | 284.4 |
| 85° | 26.6 | 90.8 | 182.6 | 248.6 | 252.3 |
| 87.5° | 8.3 | 76.2 | 170.7 | 235.8 | 240.4 |
| 90° | 0.9 | 67.9 | 163.3 | 193.6 | 178.9 |
| 92.5° | 0.0 | 64.2 | 141.3 | 132.1 | 118.4 |
| 95° | 0.0 | 63.3 | 112.8 | 100.0 | 94.5 |
| 97.5° | 0.0 | 61.5 | 92.7 | 83.5 | 80.7 |
| 100° | 0.0 | 59.6 | 79.8 | 73.4 | 72.5 |
| 102.5° | 0.0 | 58.7 | 72.5 | 67.0 | 66.1 |
| 105° | 0.0 | 56.9 | 69.7 | 63.3 | 62.4 |
| 107.5° | 0.0 | 54.1 | 67.9 | 61.5 | 59.6 |
| 110° | 0.0 | 51.4 | 67.9 | 60.6 | 57.8 |



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-56SL-SLC-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|-----|-------|------|-------|------|
| 112.5° | 0.0 | 48.6 | 67.9 | 59.6 | 56.9 |
| 115° | 0.0 | 46.8 | 67.0 | 59.6 | 56.9 |
| 117.5° | 0.9 | 45.0 | 66.1 | 59.6 | 56.9 |
| 120° | 0.0 | 43.1 | 64.2 | 59.6 | 56.0 |
| 122.5° | 0.9 | 40.4 | 62.4 | 58.7 | 56.0 |
| 125° | 0.9 | 37.6 | 59.6 | 57.8 | 55.0 |
| 127.5° | 0.9 | 34.9 | 56.9 | 56.0 | 53.2 |
| 130° | 0.9 | 32.1 | 54.1 | 55.0 | 52.3 |
| 132.5° | 0.9 | 29.4 | 50.5 | 53.2 | 51.4 |
| 135° | 0.9 | 26.6 | 47.7 | 52.3 | 50.5 |
| 137.5° | 0.9 | 23.9 | 44.0 | 49.5 | 49.5 |
| 140° | 0.9 | 21.1 | 40.4 | 47.7 | 48.6 |
| 142.5° | 0.9 | 19.3 | 36.7 | 45.9 | 46.8 |
| 145° | 0.9 | 16.5 | 33.0 | 42.2 | 45.0 |
| 147.5° | 0.9 | 14.7 | 29.4 | 38.5 | 42.2 |
| 150° | 0.9 | 12.8 | 25.7 | 34.9 | 38.5 |
| 152.5° | 0.9 | 11.0 | 22.9 | 30.3 | 35.8 |
| 155° | 1.8 | 10.1 | 20.2 | 26.6 | 32.1 |
| 157.5° | 1.8 | 8.3 | 16.5 | 22.9 | 27.5 |
| 160° | 1.8 | 7.3 | 14.7 | 19.3 | 24.8 |
| 162.5° | 1.8 | 6.4 | 11.9 | 16.5 | 21.1 |
| 165° | 1.8 | 5.5 | 10.1 | 12.8 | 17.4 |
| 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)