

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: P284497

Luminaire Tested: **4SNLED-LD5-15SL-SLW-UNV-L835-CD1-U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P284497  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P#)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 4SNLED-LD5-15SL-SLW-UNV-L835-CD1-U  
Description: 4FT LINEAR SNLED LED FIXTURE  
SQUARE FROSTED LENS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1547.0 lumens  
Efficiency: N/A  
Efficacy: 119.0 lumens/watt  
Spacing Criteria (0/90/45): 1.26 / 1.56 / 1.59  
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.12')  
CIE Type: Semi-Direct

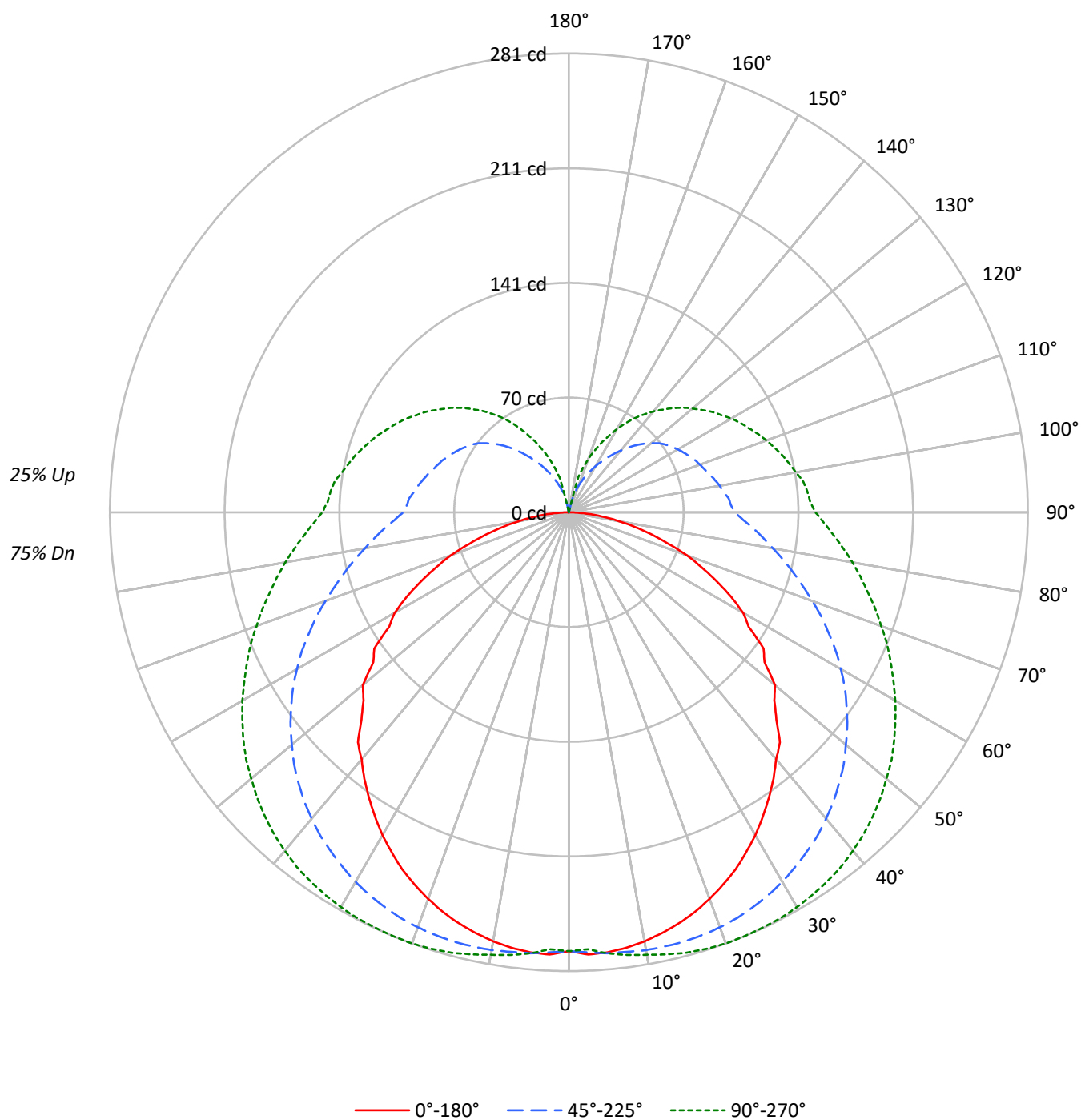
Input Watts (W): 13  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P284497

CATALOG NUMBER: 4SNLED-LD5-15SL-SLW-UNV-L835-CD1-U

### Luminous Intensity Polar Plot





TEST NUMBER: P284497

CATALOG NUMBER: 4SNLED-LD5-15SL-SLW-UNV-L835-CD1-U

**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

|     |     |     |     |     |  |     |     |     |     |  |    |    |    |  |    |    |    |  |    |    |    |
|-----|-----|-----|-----|-----|--|-----|-----|-----|-----|--|----|----|----|--|----|----|----|--|----|----|----|
| RF  | 20  |     |     |     |  | 20  |     |     |     |  | 20 |    |    |  |    | 20 |    |  |    |    | 20 |
| RC  | 80  |     |     |     |  | 70  |     |     |     |  | 50 |    |    |  |    | 30 |    |  |    |    | 10 |
| RW  | 70  | 50  | 30  | 10  |  | 70  | 50  | 30  | 10  |  | 50 | 30 | 10 |  | 50 | 30 | 10 |  | 50 | 30 | 10 |
| RCR |     |     |     |     |  |     |     |     |     |  |    |    |    |  |    |    |    |  |    |    |    |
| 0   | 113 | 113 | 113 | 113 |  | 107 | 107 | 107 | 107 |  | 97 | 97 | 97 |  | 88 | 88 | 88 |  | 79 | 79 | 79 |
| 1   | 100 | 94  | 89  | 84  |  | 95  | 89  | 84  | 80  |  | 80 | 76 | 73 |  | 72 | 69 | 66 |  | 64 | 62 | 60 |
| 2   | 90  | 80  | 72  | 66  |  | 85  | 76  | 69  | 63  |  | 68 | 63 | 58 |  | 61 | 57 | 53 |  | 55 | 51 | 48 |
| 3   | 81  | 69  | 60  | 53  |  | 76  | 66  | 58  | 51  |  | 59 | 53 | 47 |  | 53 | 48 | 43 |  | 47 | 43 | 39 |
| 4   | 74  | 61  | 51  | 44  |  | 69  | 58  | 49  | 43  |  | 52 | 45 | 39 |  | 47 | 41 | 36 |  | 42 | 37 | 33 |
| 5   | 67  | 54  | 44  | 37  |  | 63  | 51  | 43  | 36  |  | 46 | 39 | 33 |  | 42 | 35 | 31 |  | 37 | 32 | 28 |
| 6   | 62  | 48  | 39  | 32  |  | 58  | 46  | 37  | 31  |  | 41 | 34 | 29 |  | 37 | 31 | 27 |  | 34 | 28 | 24 |
| 7   | 57  | 43  | 34  | 28  |  | 54  | 41  | 33  | 27  |  | 37 | 30 | 25 |  | 34 | 28 | 23 |  | 30 | 25 | 21 |
| 8   | 53  | 39  | 31  | 25  |  | 50  | 37  | 29  | 24  |  | 34 | 27 | 22 |  | 31 | 25 | 21 |  | 28 | 23 | 19 |
| 9   | 49  | 36  | 27  | 22  |  | 47  | 34  | 26  | 21  |  | 31 | 24 | 20 |  | 28 | 23 | 18 |  | 26 | 21 | 17 |
| 10  | 46  | 33  | 25  | 20  |  | 44  | 31  | 24  | 19  |  | 29 | 22 | 18 |  | 26 | 21 | 16 |  | 24 | 19 | 15 |

**AVERAGE LUMINANCE (cd/sqm):**

|     | 0°   | 45°  | 90°  |
|-----|------|------|------|
| 0°  | 2171 | 2171 | 2171 |
| 5°  | 2188 | 2145 | 2129 |
| 10° | 2177 | 2127 | 2118 |
| 15° | 2162 | 2115 | 2122 |
| 20° | 2142 | 2106 | 2126 |
| 25° | 2122 | 2098 | 2130 |
| 30° | 2093 | 2091 | 2141 |
| 35° | 2060 | 2084 | 2155 |
| 40° | 2029 | 2082 | 2170 |
| 45° | 1990 | 2078 | 2187 |
| 50° | 1996 | 2073 | 2205 |
| 55° | 1961 | 2073 | 2231 |
| 60° | 1889 | 2075 | 2260 |
| 65° | 1785 | 2077 | 2303 |
| 70° | 1669 | 2092 | 2367 |
| 75° | 1465 | 2140 | 2463 |
| 80° | 1237 | 2243 | 2622 |
| 85° | 915  | 2453 | 2853 |



TEST NUMBER: P284497

CATALOG NUMBER: 4SNLED-LD5-15SL-SLW-UNV-L835-CD1-U

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 25.8   | 1.7       |
| 10°-20°   | 76.5   | 4.9       |
| 20°-30°   | 121.6  | 7.9       |
| 30°-40°   | 156.1  | 10.1      |
| 40°-50°   | 176.3  | 11.4      |
| 50°-60°   | 179.9  | 11.6      |
| 60°-70°   | 166.6  | 10.8      |
| 70°-80°   | 141.1  | 9.1       |
| 80°-90°   | 112.6  | 7.3       |
| 90°-100°  | 95.6   | 6.2       |
| 100°-110° | 85.2   | 5.5       |
| 110°-120° | 72.6   | 4.7       |
| 120°-130° | 57.6   | 3.7       |
| 130°-140° | 40.9   | 2.6       |
| 140°-150° | 24.4   | 1.6       |
| 150°-160° | 11.4   | 0.7       |
| 160°-170° | 2.7    | 0.2       |
| 170°-180° | 0.0    | 0.0       |
| 0°-30°    | 224.0  | 14.5      |
| 0°-40°    | 380.1  | 24.6      |
| 0°-60°    | 736.3  | 47.6      |
| 0°-90°    | 1156.6 | 74.8      |
| 90°-120°  | 253.4  | 16.4      |
| 90°-150°  | 376.3  | 24.3      |
| 90°-180°  | 390.0  | 25.2      |
| 0°-180°   | 1547.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|      | 0°  | 22.5° | 45° | 67.5° | 90° | Flux |
|------|-----|-------|-----|-------|-----|------|
| 0°   | 269 | 269   | 269 | 269   | 269 |      |
| 5°   | 270 | 268   | 271 | 271   | 271 | 26   |
| 15°  | 261 | 263   | 272 | 277   | 279 | 74   |
| 25°  | 241 | 249   | 267 | 276   | 281 | 111  |
| 35°  | 213 | 229   | 254 | 269   | 276 | 134  |
| 45°  | 180 | 204   | 234 | 254   | 263 | 139  |
| 55°  | 145 | 170   | 208 | 233   | 243 | 128  |
| 65°  | 100 | 133   | 176 | 206   | 217 | 99   |
| 75°  | 52  | 93    | 142 | 177   | 189 | 56   |
| 85°  | 13  | 60    | 113 | 150   | 163 | 15   |
| 90°  | 1   | 49    | 101 | 138   | 151 | 1    |
| 95°  | 0   | 46    | 98  | 134   | 146 | 0    |
| 105° | 0   | 42    | 90  | 123   | 135 | 0    |
| 115° | 0   | 39    | 81  | 111   | 122 | 0    |
| 125° | 0   | 34    | 72  | 98    | 107 | 0    |
| 135° | 0   | 25    | 58  | 82    | 90  | 0    |
| 145° | 0   | 16    | 41  | 62    | 70  | 0    |
| 155° | 0   | 10    | 25  | 38    | 47  | 0    |
| 165° | 0   | 6     | 11  | 16    | 22  | 0    |
| 175° | 0   | 0     | 0   | 0     | 0   | 0    |
| 180° | 0   | 0     | 0   | 0     | 0   | 0    |



TEST NUMBER: P284497

CATALOG NUMBER: 4SNLED-LD5-15SL-SLW-UNV-L835-CD1-U

**CANDELA DISTRIBUTION (FULL):**

|        | 0°    | 22.5° | 45°   | 67.5° | 90°   |
|--------|-------|-------|-------|-------|-------|
| 0°     | 268.7 | 268.7 | 268.7 | 268.7 | 268.7 |
| 2.5°   | 271.1 | 268.3 | 269.8 | 269.4 | 267.9 |
| 5°     | 270.5 | 268.3 | 271.1 | 271.1 | 271.1 |
| 7.5°   | 269.0 | 267.5 | 271.5 | 273.0 | 273.4 |
| 10°    | 266.8 | 266.8 | 272.3 | 274.5 | 275.2 |
| 12.5°  | 263.9 | 265.0 | 272.3 | 275.6 | 277.3 |
| 15°    | 260.6 | 262.8 | 272.3 | 277.3 | 279.2 |
| 17.5°  | 256.6 | 260.2 | 271.5 | 277.7 | 280.3 |
| 20°    | 251.9 | 257.4 | 270.5 | 277.7 | 281.0 |
| 22.5°  | 246.8 | 253.8 | 269.0 | 277.0 | 281.0 |
| 25°    | 241.4 | 249.4 | 266.8 | 276.2 | 280.7 |
| 27.5°  | 234.8 | 245.0 | 264.3 | 275.2 | 280.3 |
| 30°    | 228.3 | 239.9 | 261.3 | 273.7 | 279.2 |
| 32.5°  | 221.0 | 234.4 | 257.7 | 271.5 | 277.7 |
| 35°    | 213.4 | 229.1 | 253.8 | 269.4 | 275.9 |
| 37.5°  | 205.7 | 222.5 | 249.8 | 266.4 | 273.7 |
| 40°    | 197.4 | 215.9 | 245.0 | 262.8 | 270.5 |
| 42.5°  | 191.2 | 209.0 | 239.9 | 259.2 | 267.2 |
| 45°    | 179.6 | 203.9 | 234.1 | 254.5 | 263.2 |
| 47.5°  | 170.5 | 194.1 | 228.3 | 249.8 | 258.8 |
| 50°    | 164.7 | 186.1 | 221.4 | 244.3 | 253.8 |
| 52.5°  | 150.9 | 180.7 | 214.8 | 238.9 | 249.0 |
| 55°    | 145.4 | 169.8 | 207.6 | 233.0 | 243.2 |
| 57.5°  | 130.5 | 162.2 | 200.3 | 226.5 | 237.0 |
| 60°    | 123.2 | 151.6 | 192.3 | 219.9 | 230.8 |
| 62.5°  | 111.9 | 142.5 | 184.3 | 212.7 | 224.0 |
| 65°    | 99.6  | 132.7 | 175.6 | 205.7 | 217.4 |
| 67.5°  | 88.0  | 122.9 | 167.3 | 198.4 | 210.8 |
| 70°    | 76.7  | 112.7 | 158.5 | 191.2 | 203.5 |
| 72.5°  | 63.6  | 102.5 | 150.1 | 184.3 | 196.7 |
| 75°    | 52.4  | 92.7  | 142.1 | 177.1 | 189.4 |
| 77.5°  | 41.4  | 83.3  | 134.5 | 170.5 | 182.9 |
| 80°    | 31.3  | 74.2  | 126.8 | 163.6 | 176.3 |
| 82.5°  | 21.8  | 66.5  | 120.0 | 157.1 | 169.4 |
| 85°    | 13.4  | 59.6  | 113.4 | 150.1 | 162.8 |
| 87.5°  | 6.2   | 53.5  | 106.8 | 143.6 | 156.7 |
| 90°    | 0.7   | 48.8  | 101.4 | 138.1 | 150.9 |
| 92.5°  | 0.4   | 47.3  | 99.3  | 135.6 | 147.9 |
| 95°    | 0.0   | 45.8  | 98.2  | 134.1 | 146.5 |
| 97.5°  | 0.0   | 44.3  | 95.6  | 131.9 | 144.7 |
| 100°   | 0.0   | 43.7  | 93.8  | 128.7 | 141.1 |
| 102.5° | 0.0   | 42.6  | 91.6  | 125.8 | 138.1 |
| 105°   | 0.0   | 42.2  | 89.5  | 123.2 | 135.3 |
| 107.5° | 0.0   | 41.4  | 87.2  | 120.0 | 131.9 |
| 110°   | 0.0   | 40.7  | 85.4  | 117.0 | 128.7 |



TEST NUMBER: P284497

CATALOG NUMBER: 4SNLED-LD5-15SL-SLW-UNV-L835-CD1-U

**CANDELA DISTRIBUTION (continued):**

|        | 0°  | 22.5° | 45°  | 67.5° | 90°   |
|--------|-----|-------|------|-------|-------|
| 112.5° | 0.0 | 40.0  | 83.6 | 114.2 | 125.4 |
| 115°   | 0.0 | 39.2  | 81.4 | 110.8 | 121.7 |
| 117.5° | 0.0 | 38.2  | 79.3 | 107.6 | 118.5 |
| 120°   | 0.0 | 36.7  | 77.1 | 104.7 | 114.9 |
| 122.5° | 0.0 | 35.2  | 74.8 | 101.0 | 110.8 |
| 125°   | 0.0 | 33.8  | 72.3 | 97.8  | 107.2 |
| 127.5° | 0.0 | 31.6  | 69.5 | 94.2  | 102.9 |
| 130°   | 0.0 | 29.4  | 65.8 | 90.5  | 98.9  |
| 132.5° | 0.4 | 27.3  | 62.2 | 86.5  | 94.9  |
| 135°   | 0.0 | 25.1  | 58.2 | 82.5  | 90.2  |
| 137.5° | 0.0 | 23.2  | 53.8 | 78.2  | 85.4  |
| 140°   | 0.0 | 21.1  | 49.4 | 73.1  | 80.7  |
| 142.5° | 0.0 | 18.5  | 45.1 | 67.6  | 75.6  |
| 145°   | 0.0 | 16.4  | 40.7 | 61.8  | 70.5  |
| 147.5° | 0.4 | 14.5  | 36.7 | 55.6  | 65.0  |
| 150°   | 0.4 | 13.0  | 32.8 | 49.4  | 58.9  |
| 152.5° | 0.4 | 11.7  | 28.7 | 43.7  | 52.7  |
| 155°   | 0.4 | 10.2  | 25.1 | 37.8  | 46.9  |
| 157.5° | 0.4 | 8.7   | 21.1 | 32.0  | 40.7  |
| 160°   | 0.4 | 7.7   | 17.5 | 26.9  | 34.9  |
| 162.5° | 0.4 | 6.6   | 14.2 | 21.1  | 28.7  |
| 165°   | 0.4 | 5.5   | 11.3 | 15.6  | 22.2  |
| 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)