

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-LD5-20SL-SLW-UNV-L940-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 (P27403)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 4SNLED-LD5-20SL-SLW-UNV-L940-CD1-U
Description: 4FT LINEAR SNLED LED FIXTURE
SQUARE FROSTED LENS
Light Source: -
Ballast/Driver: -

Summary

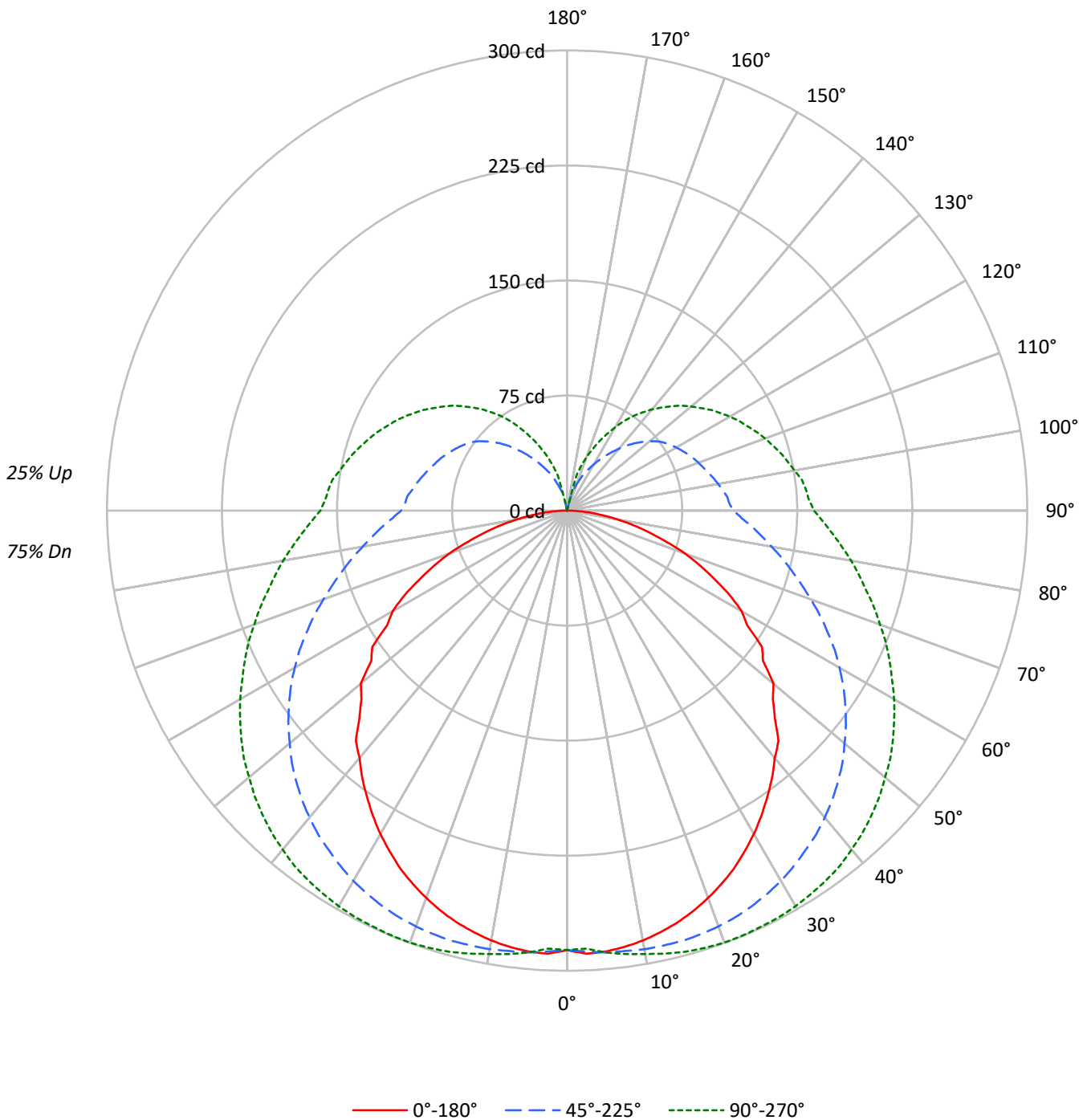
Lumens per Lamp: N/A
Luminaire Lumens: 1650.0 lumens
Efficiency: N/A
Efficacy: 103.1 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.56 / 1.59
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.12')
CIE Type: Semi-Direct

Input Watts (W): 16
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-LD5-20SL-SLW-UNV-L940-CD1-U

Luminous Intensity Polar Plot





TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-20SL-SLW-UNV-L940-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 | 50 | 30 | 10 | 0 | |
| RCR | | | | | | | | | | | | | | | | | | | | | | |
| 0 | 113 | 113 | 113 | 113 | 107 | 107 | 107 | 107 | 97 | 97 | 97 | 88 | 88 | 88 | 79 | 79 | 79 | 75 | | | | |
| 1 | 100 | 94 | 89 | 84 | 95 | 89 | 84 | 80 | 80 | 76 | 73 | 72 | 69 | 66 | 64 | 62 | 60 | 56 | | | | |
| 2 | 90 | 80 | 72 | 66 | 85 | 76 | 69 | 63 | 68 | 63 | 58 | 61 | 57 | 53 | 55 | 51 | 48 | 44 | | | | |
| 3 | 81 | 69 | 60 | 53 | 76 | 66 | 58 | 51 | 59 | 53 | 47 | 53 | 48 | 43 | 47 | 43 | 39 | 36 | | | | |
| 4 | 74 | 61 | 51 | 44 | 69 | 58 | 49 | 43 | 52 | 45 | 39 | 47 | 41 | 36 | 42 | 37 | 33 | 30 | | | | |
| 5 | 67 | 54 | 44 | 37 | 63 | 51 | 43 | 36 | 46 | 39 | 33 | 42 | 35 | 31 | 37 | 32 | 28 | 25 | | | | |
| 6 | 62 | 48 | 39 | 32 | 58 | 46 | 37 | 31 | 41 | 34 | 29 | 37 | 31 | 27 | 34 | 28 | 24 | 22 | | | | |
| 7 | 57 | 43 | 34 | 28 | 54 | 41 | 33 | 27 | 37 | 30 | 25 | 34 | 28 | 23 | 30 | 25 | 21 | 19 | | | | |
| 8 | 53 | 39 | 31 | 25 | 50 | 37 | 29 | 24 | 34 | 27 | 22 | 31 | 25 | 21 | 28 | 23 | 19 | 17 | | | | |
| 9 | 49 | 36 | 27 | 22 | 47 | 34 | 26 | 21 | 31 | 24 | 20 | 28 | 23 | 18 | 26 | 21 | 17 | 15 | | | | |
| 10 | 46 | 33 | 25 | 20 | 44 | 31 | 24 | 19 | 29 | 22 | 18 | 26 | 21 | 16 | 24 | 19 | 15 | 13 | | | | |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|------|------|------|
| 0° | 2315 | 2315 | 2315 |
| 5° | 2334 | 2288 | 2271 |
| 10° | 2323 | 2268 | 2259 |
| 15° | 2306 | 2256 | 2264 |
| 20° | 2285 | 2246 | 2268 |
| 25° | 2262 | 2238 | 2271 |
| 30° | 2232 | 2231 | 2284 |
| 35° | 2197 | 2222 | 2299 |
| 40° | 2164 | 2221 | 2314 |
| 45° | 2122 | 2216 | 2332 |
| 50° | 2128 | 2211 | 2350 |
| 55° | 2092 | 2211 | 2379 |
| 60° | 2015 | 2213 | 2411 |
| 65° | 1903 | 2215 | 2457 |
| 70° | 1780 | 2231 | 2525 |
| 75° | 1560 | 2283 | 2627 |
| 80° | 1316 | 2393 | 2796 |
| 85° | 977 | 2617 | 3044 |



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-20SL-SLW-UNV-L940-CD1-U

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 27.5 | 1.7 |
| 10°-20° | 81.6 | 4.9 |
| 20°-30° | 129.7 | 7.9 |
| 30°-40° | 166.5 | 10.1 |
| 40°-50° | 188.0 | 11.4 |
| 50°-60° | 191.8 | 11.6 |
| 60°-70° | 177.7 | 10.8 |
| 70°-80° | 150.5 | 9.1 |
| 80°-90° | 120.1 | 7.3 |
| 90°-100° | 102.0 | 6.2 |
| 100°-110° | 90.9 | 5.5 |
| 110°-120° | 77.4 | 4.7 |
| 120°-130° | 61.5 | 3.7 |
| 130°-140° | 43.6 | 2.6 |
| 140°-150° | 26.0 | 1.6 |
| 150°-160° | 12.1 | 0.7 |
| 160°-170° | 2.9 | 0.2 |
| 170°-180° | 0.0 | 0.0 |
| 0°-30° | 238.9 | 14.5 |
| 0°-40° | 405.4 | 24.6 |
| 0°-60° | 785.3 | 47.6 |
| 0°-90° | 1233.6 | 74.8 |
| 90°-120° | 270.3 | 16.4 |
| 90°-150° | 401.4 | 24.3 |
| 90°-180° | 416.0 | 25.2 |
| 0°-180° | 1650.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|-----|-------|-----|-------|-----|------|
| 0° | 286 | 286 | 286 | 286 | 286 | |
| 5° | 288 | 286 | 289 | 289 | 289 | 27 |
| 15° | 278 | 280 | 290 | 296 | 298 | 78 |
| 25° | 257 | 266 | 285 | 295 | 299 | 119 |
| 35° | 228 | 244 | 271 | 287 | 294 | 142 |
| 45° | 192 | 218 | 250 | 271 | 281 | 149 |
| 55° | 155 | 181 | 221 | 248 | 259 | 136 |
| 65° | 106 | 142 | 187 | 220 | 232 | 105 |
| 75° | 56 | 99 | 152 | 189 | 202 | 59 |
| 85° | 14 | 64 | 121 | 160 | 174 | 16 |
| 90° | 1 | 52 | 108 | 147 | 161 | 1 |
| 95° | 0 | 49 | 105 | 143 | 156 | 0 |
| 105° | 0 | 45 | 95 | 131 | 144 | 0 |
| 115° | 0 | 42 | 87 | 118 | 130 | 0 |
| 125° | 0 | 36 | 77 | 104 | 114 | 0 |
| 135° | 0 | 27 | 62 | 88 | 96 | 0 |
| 145° | 0 | 17 | 43 | 66 | 75 | 0 |
| 155° | 0 | 11 | 27 | 40 | 50 | 0 |
| 165° | 0 | 6 | 12 | 17 | 24 | 0 |
| 175° | 0 | 0 | 0 | 0 | 0 | 0 |
| 180° | 0 | 0 | 0 | 0 | 0 | 0 |



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-20SL-SLW-UNV-L940-CD1-U

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|-------|-------|-------|-------|-------|
| 0° | 286.5 | 286.5 | 286.5 | 286.5 | 286.5 |
| 2.5° | 289.2 | 286.1 | 287.7 | 287.3 | 285.8 |
| 5° | 288.5 | 286.1 | 289.2 | 289.2 | 289.2 |
| 7.5° | 286.9 | 285.4 | 289.6 | 291.2 | 291.6 |
| 10° | 284.6 | 284.6 | 290.4 | 292.7 | 293.5 |
| 12.5° | 281.5 | 282.7 | 290.4 | 293.9 | 295.8 |
| 15° | 278.0 | 280.3 | 290.4 | 295.8 | 297.8 |
| 17.5° | 273.7 | 277.6 | 289.6 | 296.2 | 298.9 |
| 20° | 268.7 | 274.5 | 288.5 | 296.2 | 299.7 |
| 22.5° | 263.3 | 270.6 | 286.9 | 295.4 | 299.7 |
| 25° | 257.4 | 266.0 | 284.6 | 294.7 | 299.3 |
| 27.5° | 250.5 | 261.3 | 281.9 | 293.5 | 298.9 |
| 30° | 243.5 | 255.9 | 278.8 | 292.0 | 297.8 |
| 32.5° | 235.7 | 250.1 | 274.9 | 289.6 | 296.2 |
| 35° | 227.6 | 244.3 | 270.6 | 287.3 | 294.3 |
| 37.5° | 219.5 | 237.3 | 266.4 | 284.2 | 292.0 |
| 40° | 210.5 | 230.3 | 261.3 | 280.3 | 288.5 |
| 42.5° | 203.9 | 222.9 | 255.9 | 276.4 | 285.0 |
| 45° | 191.5 | 217.5 | 249.7 | 271.4 | 280.7 |
| 47.5° | 181.8 | 207.0 | 243.5 | 266.4 | 276.1 |
| 50° | 175.6 | 198.5 | 236.1 | 260.5 | 270.6 |
| 52.5° | 160.9 | 192.7 | 229.1 | 254.7 | 265.6 |
| 55° | 155.1 | 181.1 | 221.4 | 248.5 | 259.4 |
| 57.5° | 139.2 | 172.9 | 213.6 | 241.6 | 252.8 |
| 60° | 131.4 | 161.7 | 205.1 | 234.6 | 246.2 |
| 62.5° | 119.4 | 152.0 | 196.6 | 226.8 | 238.8 |
| 65° | 106.2 | 141.5 | 187.3 | 219.5 | 231.9 |
| 67.5° | 93.8 | 131.1 | 178.4 | 211.7 | 224.9 |
| 70° | 81.8 | 120.2 | 169.0 | 203.9 | 217.1 |
| 72.5° | 67.9 | 109.3 | 160.1 | 196.6 | 209.8 |
| 75° | 55.8 | 98.9 | 151.6 | 188.8 | 202.0 |
| 77.5° | 44.2 | 88.8 | 143.5 | 181.8 | 195.0 |
| 80° | 33.3 | 79.1 | 135.3 | 174.5 | 188.0 |
| 82.5° | 23.3 | 71.0 | 127.9 | 167.5 | 180.7 |
| 85° | 14.3 | 63.6 | 121.0 | 160.1 | 173.7 |
| 87.5° | 6.6 | 57.0 | 114.0 | 153.2 | 167.1 |
| 90° | 0.8 | 52.0 | 108.2 | 147.3 | 160.9 |
| 92.5° | 0.4 | 50.4 | 105.8 | 144.6 | 157.8 |
| 95° | 0.0 | 48.9 | 104.7 | 143.1 | 156.3 |
| 97.5° | 0.0 | 47.3 | 102.0 | 140.7 | 154.3 |
| 100° | 0.0 | 46.5 | 100.0 | 137.3 | 150.4 |
| 102.5° | 0.0 | 45.4 | 97.7 | 134.2 | 147.3 |
| 105° | 0.0 | 45.0 | 95.4 | 131.4 | 144.2 |
| 107.5° | 0.0 | 44.2 | 93.1 | 127.9 | 140.7 |
| 110° | 0.0 | 43.4 | 91.1 | 124.8 | 137.3 |



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-20SL-SLW-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|-----|-------|------|-------|-------|
| 112.5° | 0.0 | 42.6 | 89.2 | 121.7 | 133.8 |
| 115° | 0.0 | 41.9 | 86.8 | 118.3 | 129.9 |
| 117.5° | 0.0 | 40.7 | 84.5 | 114.8 | 126.4 |
| 120° | 0.0 | 39.2 | 82.2 | 111.7 | 122.5 |
| 122.5° | 0.0 | 37.6 | 79.9 | 107.8 | 118.3 |
| 125° | 0.0 | 36.1 | 77.2 | 104.3 | 114.4 |
| 127.5° | 0.0 | 33.7 | 74.1 | 100.4 | 109.7 |
| 130° | 0.0 | 31.4 | 70.2 | 96.5 | 105.5 |
| 132.5° | 0.4 | 29.1 | 66.3 | 92.3 | 101.2 |
| 135° | 0.0 | 26.8 | 62.0 | 88.0 | 96.2 |
| 137.5° | 0.0 | 24.8 | 57.4 | 83.4 | 91.1 |
| 140° | 0.0 | 22.5 | 52.7 | 77.9 | 86.1 |
| 142.5° | 0.0 | 19.8 | 48.1 | 72.1 | 80.6 |
| 145° | 0.0 | 17.4 | 43.4 | 65.9 | 75.2 |
| 147.5° | 0.4 | 15.5 | 39.2 | 59.3 | 69.4 |
| 150° | 0.4 | 14.0 | 34.9 | 52.7 | 62.8 |
| 152.5° | 0.4 | 12.4 | 30.6 | 46.5 | 56.2 |
| 155° | 0.4 | 10.9 | 26.8 | 40.3 | 50.0 |
| 157.5° | 0.4 | 9.3 | 22.5 | 34.1 | 43.4 |
| 160° | 0.4 | 8.1 | 18.6 | 28.7 | 37.2 |
| 162.5° | 0.4 | 7.0 | 15.1 | 22.5 | 30.6 |
| 165° | 0.4 | 5.8 | 12.0 | 16.7 | 23.7 |
| 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)