

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: P289737

Luminaire Tested: **4SSRK-TS-20-L835-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P289737
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1901-078-6)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 4SSRK-TS-20-L835-CD1-U
Description: 2000 LUMEN, 4 FOOT SSRK LED LUMINAIRE WITH TRILOBE SMOOTH LENS AND 80 CRI 3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1850.5 lumens
Efficiency: N/A
Efficacy: 135.1 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.29 / 1.4
Luminous Opening: Rectangular w/ Sides (W: 0.04' x L: 4' x H: 0.17')
CIE Type: Semi-Direct

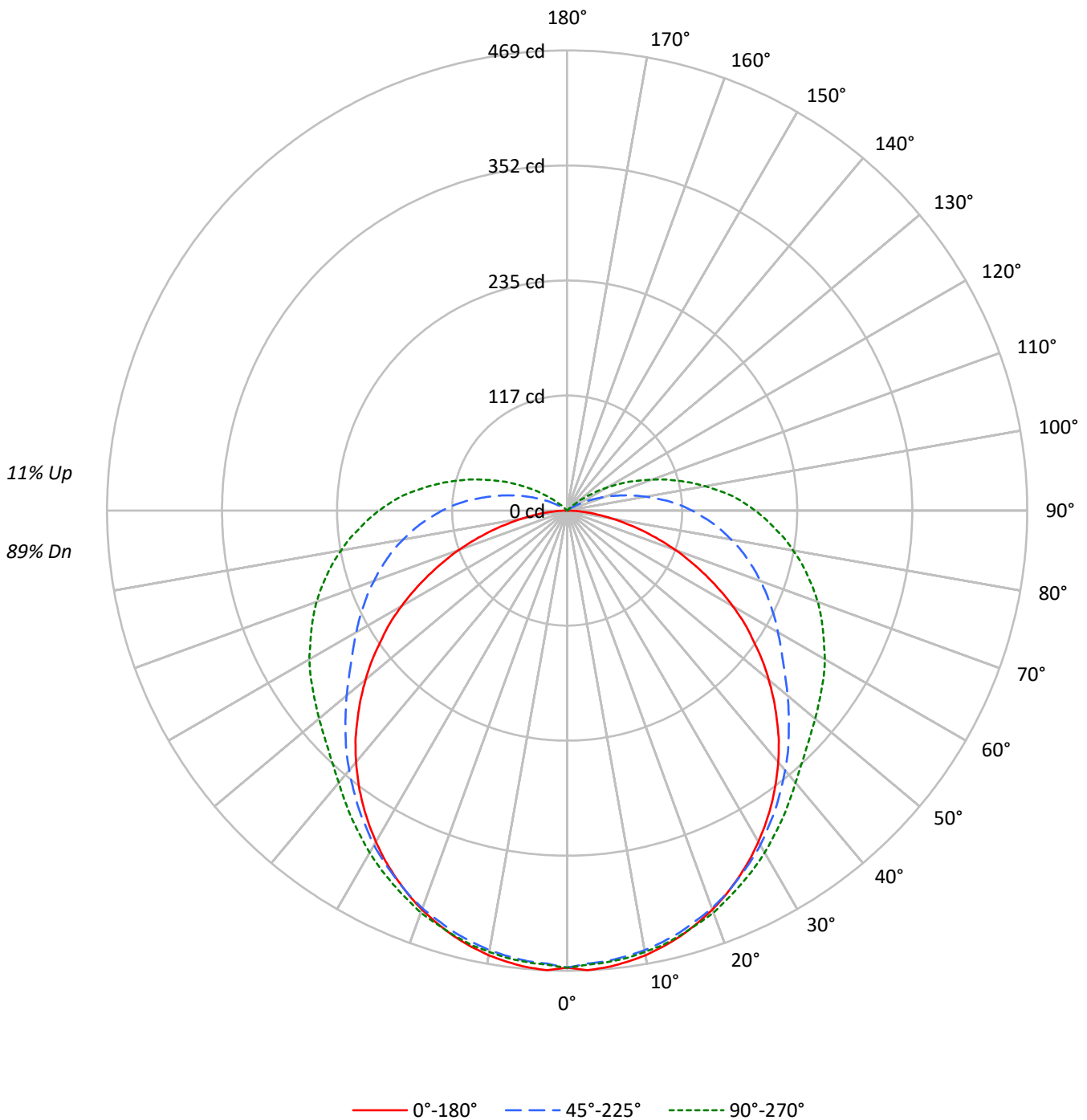
Input Watts (W): 13.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





TEST NUMBER: P289737

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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 | 116 | 116 | 116 | 116 | 112 | 112 | 112 | 112 | 105 | 105 | 105 | 98 | 98 | 98 | 92 | 92 | 92 | 89 | | | | |
| 1 | 103 | 97 | 91 | 87 | 99 | 94 | 89 | 84 | 87 | 83 | 79 | 81 | 78 | 75 | 76 | 73 | 71 | 68 | | | | |
| 2 | 93 | 83 | 75 | 68 | 89 | 80 | 73 | 67 | 75 | 68 | 63 | 70 | 65 | 60 | 65 | 61 | 57 | 54 | | | | |
| 3 | 84 | 72 | 63 | 56 | 80 | 69 | 61 | 54 | 65 | 58 | 52 | 61 | 55 | 50 | 57 | 52 | 47 | 45 | | | | |
| 4 | 76 | 63 | 54 | 46 | 73 | 61 | 52 | 45 | 57 | 50 | 44 | 53 | 47 | 42 | 50 | 45 | 40 | 37 | | | | |
| 5 | 70 | 56 | 47 | 39 | 67 | 54 | 45 | 39 | 51 | 43 | 37 | 48 | 41 | 36 | 45 | 39 | 34 | 32 | | | | |
| 6 | 65 | 50 | 41 | 34 | 62 | 49 | 40 | 34 | 46 | 38 | 32 | 43 | 36 | 31 | 41 | 35 | 30 | 28 | | | | |
| 7 | 60 | 46 | 36 | 30 | 57 | 44 | 36 | 29 | 42 | 34 | 28 | 39 | 33 | 28 | 37 | 31 | 27 | 24 | | | | |
| 8 | 56 | 41 | 33 | 27 | 53 | 40 | 32 | 26 | 38 | 31 | 25 | 36 | 29 | 25 | 34 | 28 | 24 | 22 | | | | |
| 9 | 52 | 38 | 29 | 24 | 50 | 37 | 29 | 23 | 35 | 28 | 23 | 33 | 27 | 22 | 31 | 26 | 21 | 19 | | | | |
| 10 | 49 | 35 | 27 | 21 | 47 | 34 | 26 | 21 | 32 | 25 | 21 | 31 | 24 | 20 | 29 | 23 | 19 | 17 | | | | |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|-------|-------|-------|
| 0° | 30083 | 30083 | 30083 |
| 5° | 30178 | 23909 | 22197 |
| 10° | 29959 | 19836 | 17567 |
| 15° | 29663 | 16842 | 14455 |
| 20° | 29294 | 14536 | 12204 |
| 25° | 28862 | 12635 | 10448 |
| 30° | 28393 | 11082 | 9074 |
| 35° | 27869 | 9736 | 7943 |
| 40° | 27256 | 8572 | 7008 |
| 45° | 26523 | 7562 | 6289 |
| 50° | 25672 | 6689 | 5749 |
| 55° | 24645 | 5952 | 5312 |
| 60° | 23492 | 5386 | 4943 |
| 65° | 21856 | 4905 | 4590 |
| 70° | 19942 | 4469 | 4281 |
| 75° | 17276 | 4066 | 3970 |
| 80° | 13868 | 3670 | 3673 |
| 85° | 9437 | 3282 | 3375 |



TEST NUMBER: P289737

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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 44.1 | 2.4 |
| 10°-20° | 126.3 | 6.8 |
| 20°-30° | 191.7 | 10.4 |
| 30°-40° | 233.0 | 12.6 |
| 40°-50° | 248.7 | 13.4 |
| 50°-60° | 243.9 | 13.2 |
| 60°-70° | 222.9 | 12.0 |
| 70°-80° | 189.1 | 10.2 |
| 80°-90° | 147.2 | 8.0 |
| 90°-100° | 103.8 | 5.6 |
| 100°-110° | 61.7 | 3.3 |
| 110°-120° | 29.2 | 1.6 |
| 120°-130° | 8.5 | 0.5 |
| 130°-140° | 0.5 | 0.0 |
| 140°-150° | 0.0 | 0.0 |
| 150°-160° | 0.0 | 0.0 |
| 160°-170° | 0.0 | 0.0 |
| 170°-180° | 0.0 | 0.0 |
| 0°-30° | 362.0 | 19.6 |
| 0°-40° | 595.1 | 32.2 |
| 0°-60° | 1087.7 | 58.8 |
| 0°-90° | 1646.9 | 89.0 |
| 90°-120° | 194.7 | 10.5 |
| 90°-150° | 203.6 | 11.0 |
| 90°-180° | 204.0 | 11.0 |
| 0°-180° | 1850.5 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|-----|-------|-----|-------|-----|------|
| 0° | 466 | 466 | 466 | 466 | 466 | |
| 5° | 467 | 466 | 461 | 464 | 462 | 44 |
| 15° | 449 | 448 | 445 | 449 | 448 | 127 |
| 25° | 413 | 413 | 414 | 420 | 420 | 190 |
| 35° | 364 | 366 | 371 | 380 | 383 | 227 |
| 45° | 302 | 308 | 319 | 336 | 344 | 233 |
| 55° | 232 | 242 | 269 | 304 | 317 | 208 |
| 65° | 156 | 176 | 229 | 272 | 288 | 154 |
| 75° | 80 | 121 | 190 | 237 | 253 | 85 |
| 85° | 19 | 77 | 149 | 196 | 213 | 21 |
| 90° | 1 | 57 | 127 | 175 | 192 | 2 |
| 95° | 1 | 38 | 105 | 152 | 169 | 1 |
| 105° | 1 | 10 | 60 | 102 | 117 | 1 |
| 115° | 1 | 1 | 24 | 56 | 69 | 1 |
| 125° | 1 | 0 | 1 | 19 | 27 | 1 |
| 135° | 0 | 0 | 0 | 0 | 0 | 0 |
| 145° | 0 | 0 | 0 | 0 | 0 | 0 |
| 155° | 0 | 0 | 0 | 0 | 0 | 0 |
| 165° | 0 | 0 | 0 | 0 | 0 | 0 |
| 175° | 0 | 0 | 0 | 0 | 0 | 0 |
| 180° | 0 | 0 | 0 | 0 | 0 | 0 |



TEST NUMBER: P289737

CATALOG NUMBER: 4SSRK-TS-20-L835-CD1-U

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|-------|-------|-------|-------|-------|
| 0° | 465.8 | 465.8 | 465.8 | 465.8 | 465.8 |
| 2.5° | 468.9 | 467.2 | 462.2 | 464.8 | 463.4 |
| 5° | 467.2 | 465.5 | 461.0 | 463.6 | 462.2 |
| 7.5° | 464.1 | 462.9 | 458.3 | 461.2 | 460.2 |
| 10° | 460.2 | 459.0 | 454.9 | 458.3 | 456.8 |
| 12.5° | 454.9 | 453.7 | 450.3 | 453.7 | 453.2 |
| 15° | 448.6 | 447.7 | 444.8 | 448.6 | 447.9 |
| 17.5° | 441.1 | 440.4 | 438.0 | 442.8 | 441.9 |
| 20° | 432.7 | 432.2 | 431.5 | 435.8 | 436.1 |
| 22.5° | 423.5 | 423.5 | 423.0 | 427.9 | 428.1 |
| 25° | 412.9 | 413.1 | 413.6 | 420.1 | 420.1 |
| 27.5° | 402.0 | 402.7 | 403.9 | 410.2 | 411.7 |
| 30° | 389.9 | 391.1 | 393.8 | 400.6 | 402.7 |
| 32.5° | 377.1 | 379.1 | 382.0 | 390.4 | 392.6 |
| 35° | 363.8 | 365.8 | 370.6 | 379.8 | 382.9 |
| 37.5° | 349.6 | 351.8 | 358.0 | 368.4 | 372.5 |
| 40° | 334.6 | 337.0 | 345.5 | 358.5 | 362.1 |
| 42.5° | 319.4 | 322.8 | 333.2 | 347.2 | 352.7 |
| 45° | 302.5 | 307.5 | 319.4 | 336.3 | 344.3 |
| 47.5° | 285.6 | 291.6 | 306.3 | 327.1 | 336.8 |
| 50° | 268.2 | 274.9 | 293.3 | 318.9 | 330.0 |
| 52.5° | 250.8 | 258.3 | 280.5 | 311.2 | 323.2 |
| 55° | 231.9 | 241.8 | 268.6 | 303.7 | 316.7 |
| 57.5° | 214.5 | 225.2 | 258.0 | 296.2 | 310.4 |
| 60° | 195.0 | 208.5 | 248.1 | 288.5 | 303.4 |
| 62.5° | 175.6 | 191.8 | 238.7 | 280.5 | 295.2 |
| 65° | 155.8 | 175.9 | 228.8 | 272.5 | 287.7 |
| 67.5° | 136.3 | 159.7 | 219.6 | 264.3 | 280.0 |
| 70° | 117.7 | 145.7 | 209.5 | 255.8 | 271.8 |
| 72.5° | 98.1 | 133.4 | 200.0 | 246.9 | 262.8 |
| 75° | 80.0 | 121.3 | 190.1 | 237.2 | 253.4 |
| 77.5° | 61.6 | 109.9 | 180.5 | 227.6 | 244.2 |
| 80° | 46.1 | 99.3 | 169.8 | 217.4 | 233.9 |
| 82.5° | 31.4 | 88.7 | 159.4 | 207.0 | 224.2 |
| 85° | 18.8 | 77.3 | 149.1 | 196.4 | 212.8 |
| 87.5° | 8.5 | 67.4 | 137.7 | 185.5 | 202.7 |
| 90° | 1.4 | 57.3 | 127.3 | 175.2 | 191.6 |
| 92.5° | 1.7 | 48.1 | 116.7 | 164.0 | 180.5 |
| 95° | 1.4 | 38.4 | 105.1 | 151.7 | 169.4 |
| 97.5° | 1.4 | 30.2 | 92.8 | 139.6 | 155.8 |
| 100° | 1.2 | 22.5 | 80.9 | 126.8 | 142.8 |
| 102.5° | 1.2 | 15.9 | 70.3 | 114.3 | 130.2 |
| 105° | 1.2 | 10.4 | 59.9 | 101.7 | 117.2 |
| 107.5° | 1.2 | 5.8 | 49.8 | 89.6 | 105.3 |
| 110° | 1.2 | 2.2 | 40.6 | 78.8 | 91.8 |



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CATALOG NUMBER: 4SSRK-TS-20-L835-CD1-U

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|-----|-------|------|-------|------|
| 112.5° | 1.0 | 1.0 | 31.6 | 66.7 | 80.2 |
| 115° | 1.0 | 1.0 | 24.4 | 55.8 | 69.1 |
| 117.5° | 1.0 | 0.7 | 16.7 | 45.7 | 57.7 |
| 120° | 1.0 | 0.7 | 10.4 | 36.5 | 46.9 |
| 122.5° | 0.7 | 0.5 | 5.1 | 27.1 | 37.4 |
| 125° | 0.7 | 0.5 | 1.2 | 18.6 | 27.3 |
| 127.5° | 0.7 | 0.2 | 0.0 | 11.1 | 18.8 |
| 130° | 0.5 | 0.2 | 0.0 | 5.3 | 11.1 |
| 132.5° | 0.5 | 0.2 | 0.0 | 1.0 | 4.8 |
| 135° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 137.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 140° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 142.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 145° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 147.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 150° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 152.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 155° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 157.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 160° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 162.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 165° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 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)