

Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

Brand: METALUX

Report Number: P601459

Luminaire Tested: 22CGSB-35-L935

Issue Date: 1/24/2024

Test Information

Test Method: LM-79-2019
Report Number: P601459
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2307-104-1)
Test Lab: INNOVATION CENTER
Issue Date: 1/24/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 22CGSB-35-L935
Description: 2x2 CGSB AT 3500lm 3500K 90CRI
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

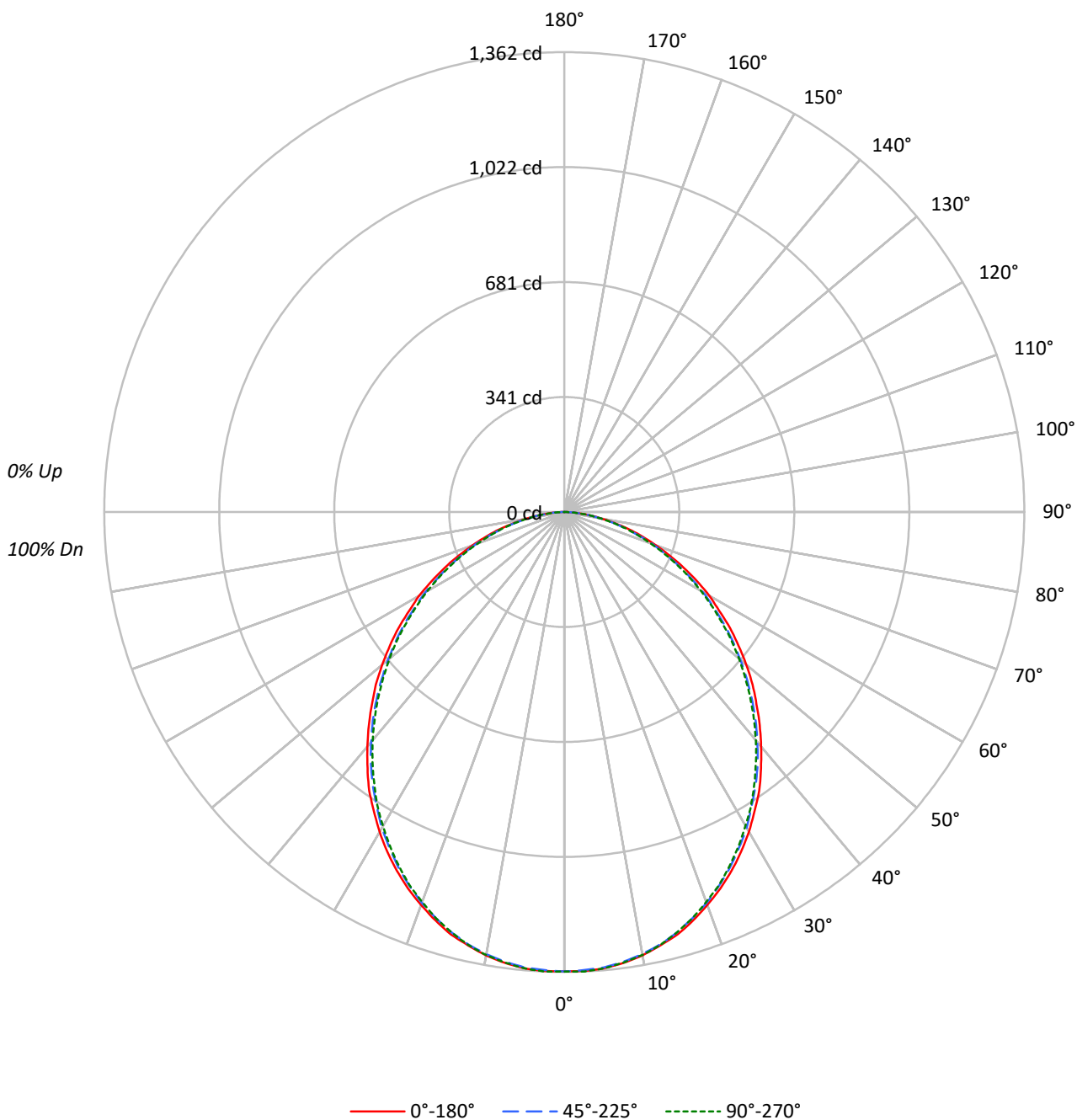
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3400.0 lumens
Efficiency: N/A
Efficacy: 116.4 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.18 / 1.29
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 29.2
Input Voltage (V): 120
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: 24 FT

TEST NUMBER: P601459
CATALOG NUMBER: 22CGSB-35-L935

Luminous Intensity Polar Plot





TEST NUMBER: P601459
 CATALOG NUMBER: 22CGSB-35-L935

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 | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | 106 | 106 | 106 | 102 | 102 | 102 | 100 |
| 1 | 109 | 105 | 101 | 97 | 107 | 102 | 99 | 95 | 98 | 95 | 92 | 94 | 92 | 89 | 91 | 89 | 87 | 85 |
| 2 | 100 | 92 | 85 | 80 | 97 | 90 | 84 | 79 | 86 | 81 | 77 | 83 | 79 | 75 | 80 | 77 | 73 | 71 |
| 3 | 91 | 81 | 73 | 67 | 89 | 79 | 72 | 66 | 76 | 70 | 65 | 74 | 68 | 64 | 71 | 67 | 63 | 61 |
| 4 | 84 | 72 | 64 | 57 | 81 | 71 | 63 | 57 | 68 | 61 | 56 | 66 | 60 | 55 | 64 | 59 | 54 | 52 |
| 5 | 77 | 65 | 56 | 49 | 75 | 64 | 55 | 49 | 61 | 54 | 49 | 59 | 53 | 48 | 58 | 52 | 48 | 45 |
| 6 | 71 | 58 | 50 | 43 | 69 | 57 | 49 | 43 | 56 | 48 | 43 | 54 | 47 | 42 | 52 | 47 | 42 | 40 |
| 7 | 66 | 53 | 44 | 38 | 65 | 52 | 44 | 38 | 51 | 43 | 38 | 49 | 43 | 38 | 48 | 42 | 37 | 36 |
| 8 | 62 | 49 | 40 | 34 | 60 | 48 | 40 | 34 | 47 | 39 | 34 | 45 | 39 | 34 | 44 | 38 | 34 | 32 |
| 9 | 58 | 45 | 37 | 31 | 56 | 44 | 36 | 31 | 43 | 36 | 31 | 42 | 35 | 31 | 41 | 35 | 31 | 29 |
| 10 | 54 | 41 | 33 | 28 | 53 | 41 | 33 | 28 | 40 | 33 | 28 | 39 | 32 | 28 | 38 | 32 | 28 | 26 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|------|------|------|
| 0° | 3661 | 3661 | 3661 |
| 5° | 3664 | 3657 | 3664 |
| 10° | 3644 | 3633 | 3640 |
| 15° | 3609 | 3590 | 3590 |
| 20° | 3547 | 3528 | 3520 |
| 25° | 3480 | 3448 | 3436 |
| 30° | 3398 | 3356 | 3335 |
| 35° | 3308 | 3245 | 3223 |
| 40° | 3185 | 3123 | 3099 |
| 45° | 3064 | 2991 | 2965 |
| 50° | 2944 | 2848 | 2825 |
| 55° | 2810 | 2708 | 2670 |
| 60° | 2669 | 2553 | 2516 |
| 65° | 2485 | 2364 | 2339 |
| 70° | 2271 | 2186 | 2132 |
| 75° | 2071 | 1944 | 1959 |
| 80° | 1785 | 1680 | 1702 |
| 85° | 1380 | 1340 | 1257 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3064 cd/sqm



TEST NUMBER: P601459
 CATALOG NUMBER: 22CGSB-35-L935

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 128.5 | 3.8 |
| 10°-20° | 363.4 | 10.7 |
| 20°-30° | 535.2 | 15.7 |
| 30°-40° | 619.2 | 18.2 |
| 40°-50° | 608.7 | 17.9 |
| 50°-60° | 518.7 | 15.3 |
| 60°-70° | 371.7 | 10.9 |
| 70°-80° | 201.9 | 5.9 |
| 80°-90° | 52.7 | 1.5 |
| 90°-100° | 0.0 | 0.0 |
| 100°-110° | 0.0 | 0.0 |
| 110°-120° | 0.0 | 0.0 |
| 120°-130° | 0.0 | 0.0 |
| 130°-140° | 0.0 | 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° | 1027.2 | 30.2 |
| 0°-40° | 1646.3 | 48.4 |
| 0°-60° | 2773.8 | 81.6 |
| 0°-90° | 3400.0 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 3400.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|------|-------|------|-------|------|------|
| 0° | 1361 | 1361 | 1361 | 1361 | 1361 | |
| 5° | 1356 | 1354 | 1354 | 1354 | 1356 | 129 |
| 15° | 1296 | 1290 | 1289 | 1287 | 1289 | 365 |
| 25° | 1172 | 1167 | 1161 | 1159 | 1157 | 540 |
| 35° | 1007 | 999 | 988 | 982 | 981 | 628 |
| 45° | 805 | 800 | 786 | 779 | 779 | 622 |
| 55° | 599 | 588 | 577 | 570 | 569 | 535 |
| 65° | 390 | 382 | 371 | 367 | 367 | 387 |
| 75° | 199 | 192 | 187 | 184 | 188 | 210 |
| 85° | 45 | 45 | 43 | 42 | 41 | 54 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P601459
 CATALOG NUMBER: 22CGSB-35-L935

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|---------------|---------------|---------------|---------------|---------------|
| 0° | 1360.6 | 1360.6 | 1360.6 | 1360.6 | <i>1360.6</i> |
| 2.5° | <i>1360.6</i> | <i>1359.2</i> | <i>1357.9</i> | <i>1359.2</i> | <i>1362.0</i> |
| 5° | 1356.5 | 1353.8 | 1353.8 | 1353.8 | <i>1356.5</i> |
| 7.5° | 1347.0 | 1344.3 | 1343.0 | 1344.3 | <i>1345.7</i> |
| 10° | 1333.5 | 1330.8 | 1329.4 | 1330.8 | <i>1332.1</i> |
| 12.5° | 1314.5 | 1313.2 | 1311.8 | 1311.8 | <i>1313.2</i> |
| 15° | 1295.5 | 1290.1 | 1288.8 | 1287.4 | <i>1288.8</i> |
| 17.5° | 1268.4 | 1267.1 | 1261.7 | 1261.7 | <i>1261.7</i> |
| 20° | 1238.6 | 1235.9 | 1231.9 | 1229.1 | <i>1229.1</i> |
| 22.5° | 1207.5 | 1204.8 | 1198.0 | 1195.3 | <i>1196.6</i> |
| 25° | 1172.2 | 1166.8 | 1161.4 | 1158.7 | <i>1157.3</i> |
| 27.5° | 1134.3 | 1128.9 | 1120.7 | 1116.7 | <i>1116.7</i> |
| 30° | 1093.6 | 1089.6 | 1080.1 | 1074.7 | <i>1073.3</i> |
| 32.5° | 1048.9 | 1046.2 | 1032.6 | 1029.9 | <i>1029.9</i> |
| 35° | 1006.9 | 998.8 | 987.9 | 982.5 | <i>981.1</i> |
| 37.5° | 956.8 | 951.3 | 940.5 | 933.7 | <i>932.4</i> |
| 40° | 906.6 | 899.8 | 889.0 | 883.6 | <i>882.2</i> |
| 42.5° | 856.5 | 849.7 | 838.9 | 832.1 | <i>830.7</i> |
| 45° | 805.0 | 799.6 | 786.0 | 779.2 | <i>779.2</i> |
| 47.5° | 756.2 | 745.3 | 733.1 | 727.7 | <i>726.4</i> |
| 50° | 703.3 | 693.8 | 680.3 | 674.9 | <i>674.9</i> |
| 52.5° | 650.5 | 643.7 | 628.8 | 626.1 | <i>623.4</i> |
| 55° | 599.0 | 588.1 | 577.3 | 570.5 | <i>569.2</i> |
| 57.5° | 543.4 | 533.9 | 523.1 | 517.7 | <i>517.7</i> |
| 60° | 496.0 | 483.8 | 474.3 | 467.5 | <i>467.5</i> |
| 62.5° | 441.8 | 430.9 | 421.5 | 417.4 | <i>416.0</i> |
| 65° | 390.3 | 382.2 | 371.3 | 367.3 | <i>367.3</i> |
| 67.5° | 338.8 | 332.0 | 322.5 | 318.5 | <i>319.8</i> |
| 70° | 288.7 | 284.6 | 277.8 | 272.4 | <i>271.0</i> |
| 72.5° | 242.6 | 237.2 | 230.4 | 229.0 | <i>229.0</i> |
| 75° | 199.2 | 192.4 | 187.0 | 184.3 | <i>188.4</i> |
| 77.5° | 154.5 | 150.4 | 147.7 | 146.4 | <i>147.7</i> |
| 80° | 115.2 | 109.8 | 108.4 | 109.8 | <i>109.8</i> |
| 82.5° | 80.0 | 77.2 | 75.9 | 75.9 | <i>75.9</i> |
| 85° | 44.7 | 44.7 | 43.4 | 42.0 | <i>40.7</i> |
| 87.5° | 17.6 | 17.6 | 19.0 | 19.0 | <i>20.3</i> |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | <i>0.0</i> |

(END OF REPORT)