

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: P292020

Luminaire Tested: **22GR-LD5-43-F125-UNV-L82765-W2A1-U-3500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P292020
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33295)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22GR-LD5-43-F125-UNV-L82765-W2A1-U-3500K
Description: GRLED 2x2 TUNABLE WHITE TROFFER
WITH F125 LENS
Light Source: (168) 80 CRI LEDS TUNED TO 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4252.0 lumens
Efficiency: N/A
Efficacy: 120.3 lumens/watt
Spacing Criteria (0/90/45): 1.15 / 1.19 / 1.24
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

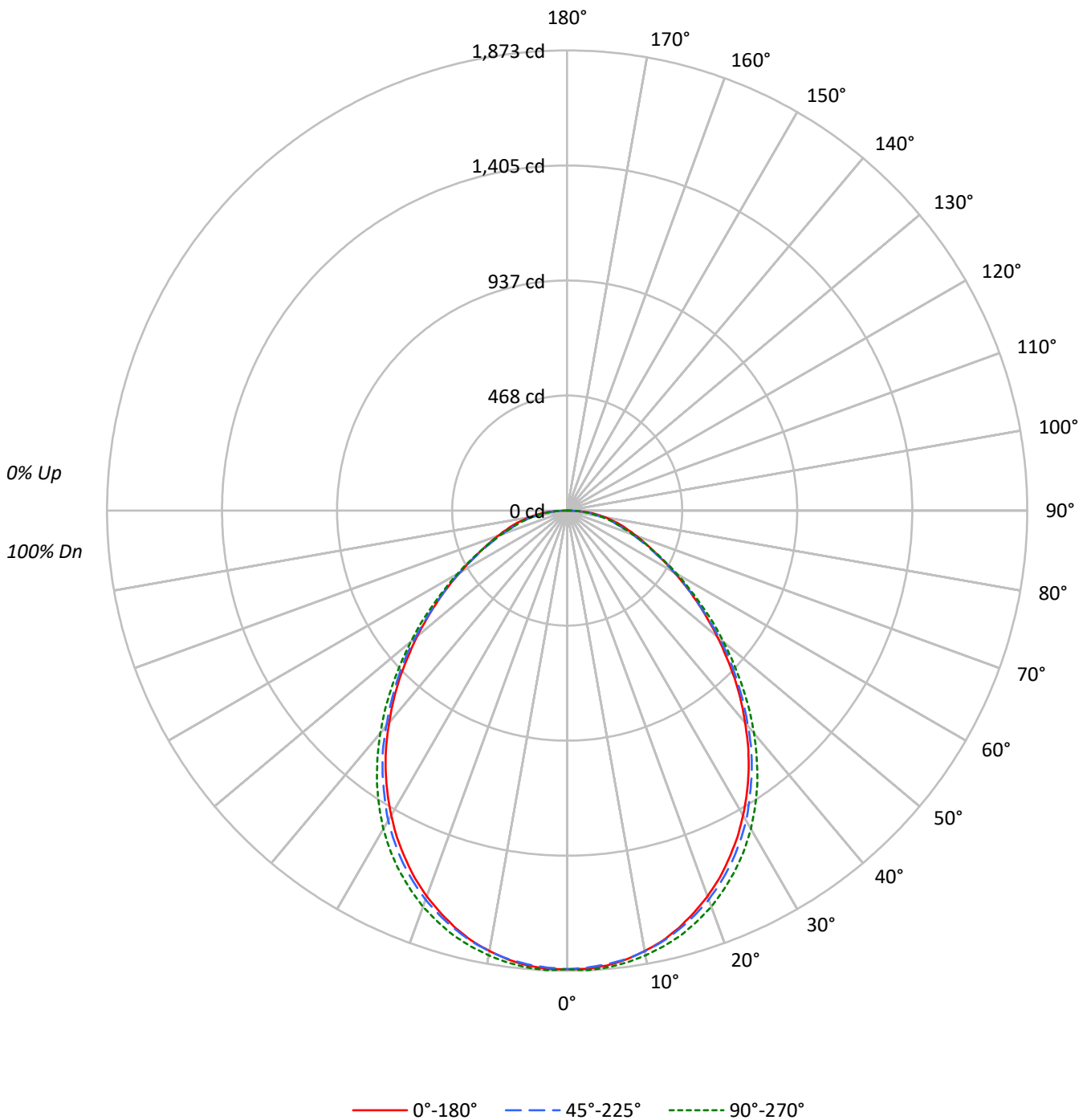
Input Watts (W): 35.34
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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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 | 0 |
| RCR | | | | | | | | | | | | | | | | | | |
| 0 | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | 106 | 106 | 106 | 102 | 102 | 102 | 100 |
| 1 | 110 | 105 | 101 | 97 | 107 | 103 | 99 | 96 | 99 | 96 | 93 | 95 | 92 | 90 | 91 | 89 | 87 | 85 |
| 2 | 100 | 93 | 86 | 81 | 98 | 91 | 85 | 80 | 87 | 82 | 78 | 84 | 80 | 76 | 81 | 78 | 75 | 73 |
| 3 | 92 | 82 | 75 | 69 | 90 | 81 | 74 | 68 | 78 | 72 | 67 | 75 | 70 | 66 | 73 | 68 | 65 | 62 |
| 4 | 85 | 74 | 65 | 59 | 83 | 72 | 65 | 59 | 70 | 63 | 58 | 68 | 62 | 57 | 65 | 60 | 56 | 54 |
| 5 | 78 | 66 | 58 | 52 | 76 | 65 | 57 | 51 | 63 | 56 | 51 | 61 | 55 | 50 | 59 | 54 | 50 | 48 |
| 6 | 73 | 60 | 52 | 45 | 71 | 59 | 51 | 45 | 57 | 50 | 45 | 56 | 49 | 45 | 54 | 49 | 44 | 42 |
| 7 | 68 | 55 | 46 | 41 | 66 | 54 | 46 | 40 | 53 | 45 | 40 | 51 | 45 | 40 | 50 | 44 | 40 | 38 |
| 8 | 63 | 50 | 42 | 36 | 62 | 50 | 42 | 36 | 48 | 41 | 36 | 47 | 41 | 36 | 46 | 40 | 36 | 34 |
| 9 | 59 | 46 | 38 | 33 | 58 | 46 | 38 | 33 | 45 | 38 | 33 | 44 | 37 | 33 | 43 | 37 | 33 | 31 |
| 10 | 56 | 43 | 35 | 30 | 54 | 42 | 35 | 30 | 41 | 35 | 30 | 40 | 34 | 30 | 40 | 34 | 30 | 28 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|------|------|------|
| 0° | 5023 | 5023 | 5023 |
| 5° | 5021 | 5008 | 5042 |
| 10° | 4974 | 4977 | 5022 |
| 15° | 4898 | 4914 | 4986 |
| 20° | 4783 | 4826 | 4913 |
| 25° | 4634 | 4699 | 4801 |
| 30° | 4451 | 4528 | 4648 |
| 35° | 4233 | 4301 | 4434 |
| 40° | 3958 | 4024 | 4155 |
| 45° | 3664 | 3721 | 3830 |
| 50° | 3337 | 3391 | 3478 |
| 55° | 3013 | 3022 | 3111 |
| 60° | 2703 | 2714 | 2777 |
| 65° | 2462 | 2413 | 2469 |
| 70° | 2345 | 2212 | 2251 |
| 75° | 2359 | 2133 | 2144 |
| 80° | 2447 | 2156 | 2140 |
| 85° | 2680 | 2285 | 2161 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 176.4 | 4.1 |
| 10°-20° | 498.2 | 11.7 |
| 20°-30° | 729.1 | 17.1 |
| 30°-40° | 819.8 | 19.3 |
| 40°-50° | 756.0 | 17.8 |
| 50°-60° | 582.7 | 13.7 |
| 60°-70° | 384.5 | 9.0 |
| 70°-80° | 223.8 | 5.3 |
| 80°-90° | 81.5 | 1.9 |
| 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° | 1403.7 | 33.0 |
| 0°-40° | 2223.5 | 52.3 |
| 0°-60° | 3562.2 | 83.8 |
| 0°-90° | 4252.0 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 4252.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|------|-------|------|-------|------|------|
| 0° | 1867 | 1867 | 1867 | 1867 | 1867 | |
| 5° | 1859 | 1855 | 1854 | 1863 | 1867 | 176 |
| 15° | 1758 | 1758 | 1764 | 1780 | 1790 | 495 |
| 25° | 1561 | 1569 | 1582 | 1604 | 1617 | 718 |
| 35° | 1288 | 1294 | 1309 | 1336 | 1350 | 803 |
| 45° | 963 | 964 | 978 | 998 | 1006 | 741 |
| 55° | 642 | 641 | 644 | 655 | 663 | 576 |
| 65° | 387 | 385 | 379 | 382 | 388 | 388 |
| 75° | 227 | 217 | 205 | 201 | 206 | 239 |
| 85° | 87 | 86 | 74 | 68 | 70 | 92 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P292020

CATALOG NUMBER: 22GR-LD5-43-F125-UNV-L82765-W2A1-U-3500K

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|--------|--------|--------|--------|--------|
| 0° | 1866.6 | 1866.6 | 1866.6 | 1866.6 | 1866.6 |
| 2.5° | 1866.6 | 1862.7 | 1861.7 | 1868.6 | 1872.6 |
| 5° | 1858.8 | 1854.8 | 1853.8 | 1862.7 | 1866.6 |
| 7.5° | 1843.0 | 1840.0 | 1841.0 | 1850.9 | 1855.8 |
| 10° | 1820.3 | 1819.3 | 1821.3 | 1832.1 | 1838.0 |
| 12.5° | 1793.6 | 1792.7 | 1796.6 | 1808.4 | 1816.3 |
| 15° | 1758.1 | 1758.1 | 1764.0 | 1779.8 | 1789.7 |
| 17.5° | 1715.7 | 1718.7 | 1727.5 | 1743.3 | 1754.2 |
| 20° | 1670.3 | 1673.3 | 1685.1 | 1702.9 | 1715.7 |
| 22.5° | 1620.0 | 1623.9 | 1635.8 | 1657.5 | 1668.3 |
| 25° | 1560.8 | 1568.7 | 1582.5 | 1604.2 | 1617.0 |
| 27.5° | 1499.6 | 1508.5 | 1521.3 | 1548.0 | 1559.8 |
| 30° | 1432.5 | 1438.5 | 1457.2 | 1481.9 | 1495.7 |
| 32.5° | 1361.5 | 1367.4 | 1383.2 | 1412.8 | 1424.6 |
| 35° | 1288.5 | 1294.4 | 1309.2 | 1335.9 | 1349.7 |
| 37.5° | 1209.6 | 1214.5 | 1232.3 | 1253.0 | 1267.8 |
| 40° | 1126.7 | 1133.6 | 1145.4 | 1170.1 | 1182.9 |
| 42.5° | 1045.8 | 1048.8 | 1061.6 | 1086.2 | 1096.1 |
| 45° | 962.9 | 963.9 | 977.7 | 997.5 | 1006.3 |
| 47.5° | 877.1 | 879.1 | 895.8 | 907.7 | 916.6 |
| 50° | 797.2 | 798.2 | 810.0 | 820.9 | 830.7 |
| 52.5° | 717.3 | 717.3 | 723.2 | 735.0 | 747.8 |
| 55° | 642.3 | 641.3 | 644.2 | 655.1 | 663.0 |
| 57.5° | 571.2 | 570.3 | 574.2 | 581.1 | 587.0 |
| 60° | 502.2 | 500.2 | 504.2 | 508.1 | 516.0 |
| 62.5° | 441.0 | 443.0 | 438.1 | 444.0 | 449.9 |
| 65° | 386.7 | 384.8 | 378.9 | 381.8 | 387.7 |
| 67.5° | 340.4 | 337.4 | 327.6 | 329.5 | 336.4 |
| 70° | 298.0 | 292.0 | 281.2 | 281.2 | 286.1 |
| 72.5° | 259.5 | 253.6 | 239.7 | 240.7 | 242.7 |
| 75° | 226.9 | 217.1 | 205.2 | 201.3 | 206.2 |
| 77.5° | 191.4 | 183.5 | 172.7 | 169.7 | 171.7 |
| 80° | 157.9 | 151.9 | 139.1 | 135.2 | 138.1 |
| 82.5° | 125.3 | 120.4 | 105.6 | 102.6 | 103.6 |
| 85° | 86.8 | 85.8 | 74.0 | 68.1 | 70.0 |
| 87.5° | 46.4 | 47.4 | 38.5 | 34.5 | 36.5 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)