

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: P291958

Luminaire Tested: **22GR-LD5-40-F125-UNV-L83050-W2A1-U-5000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P291958
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-LD5-40-F125-UNV-L83050-W2A1-U-5000K
Description: GRLED 2x2 TUNABLE WHITE TROFFER
WITH F125 LENS
Light Source: (168) 80 CRI LEDS TUNED TO 5000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4323.0 lumens
Efficiency: N/A
Efficacy: 127.4 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

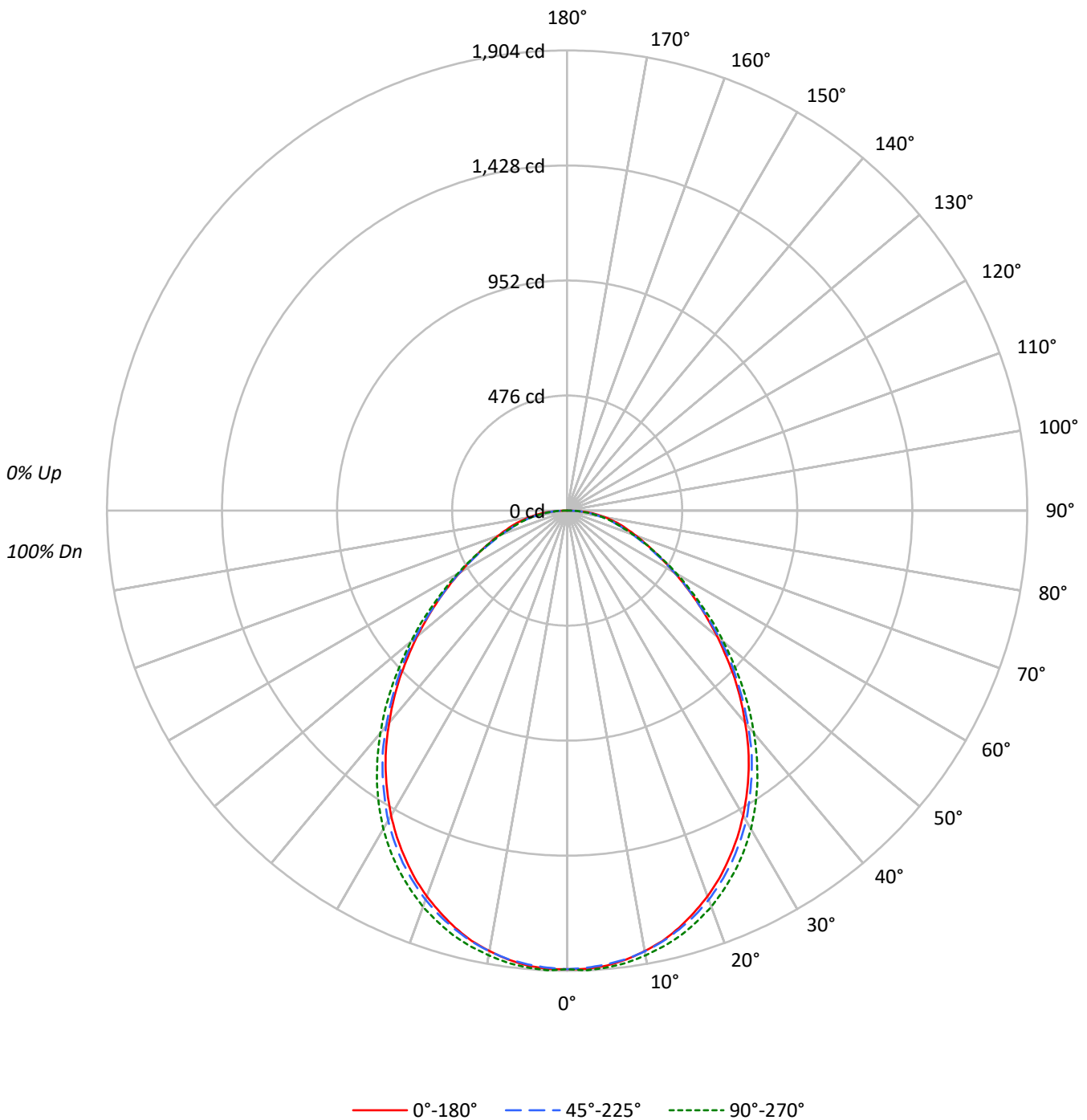
Input Watts (W): 33.945
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|------|------|------|
| 0° | 5107 | 5107 | 5107 |
| 5° | 5105 | 5091 | 5126 |
| 10° | 5057 | 5060 | 5106 |
| 15° | 4980 | 4997 | 5069 |
| 20° | 4863 | 4906 | 4995 |
| 25° | 4712 | 4777 | 4881 |
| 30° | 4526 | 4603 | 4725 |
| 35° | 4303 | 4373 | 4508 |
| 40° | 4024 | 4091 | 4225 |
| 45° | 3726 | 3783 | 3894 |
| 50° | 3393 | 3448 | 3536 |
| 55° | 3064 | 3073 | 3163 |
| 60° | 2748 | 2759 | 2823 |
| 65° | 2504 | 2453 | 2510 |
| 70° | 2383 | 2249 | 2289 |
| 75° | 2399 | 2169 | 2179 |
| 80° | 2487 | 2191 | 2176 |
| 85° | 2726 | 2322 | 2198 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 179.3 | 4.1 |
| 10°-20° | 506.5 | 11.7 |
| 20°-30° | 741.3 | 17.1 |
| 30°-40° | 833.5 | 19.3 |
| 40°-50° | 768.6 | 17.8 |
| 50°-60° | 592.4 | 13.7 |
| 60°-70° | 390.9 | 9.0 |
| 70°-80° | 227.5 | 5.3 |
| 80°-90° | 82.9 | 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° | 1427.1 | 33.0 |
| 0°-40° | 2260.6 | 52.3 |
| 0°-60° | 3621.7 | 83.8 |
| 0°-90° | 4323.0 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 4323.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|------|-------|------|-------|------|------|
| 0° | 1898 | 1898 | 1898 | 1898 | 1898 | |
| 5° | 1890 | 1886 | 1885 | 1894 | 1898 | 179 |
| 15° | 1788 | 1788 | 1794 | 1810 | 1820 | 503 |
| 25° | 1587 | 1595 | 1609 | 1631 | 1644 | 730 |
| 35° | 1310 | 1316 | 1331 | 1358 | 1372 | 817 |
| 45° | 979 | 980 | 994 | 1014 | 1023 | 754 |
| 55° | 653 | 652 | 655 | 666 | 674 | 586 |
| 65° | 393 | 391 | 385 | 388 | 394 | 394 |
| 75° | 231 | 221 | 209 | 205 | 210 | 243 |
| 85° | 88 | 87 | 75 | 69 | 71 | 93 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P291958

CATALOG NUMBER: 22GR-LD5-40-F125-UNV-L83050-W2A1-U-5000K

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|--------|--------|--------|--------|--------|
| 0° | 1897.8 | 1897.8 | 1897.8 | 1897.8 | 1897.8 |
| 2.5° | 1897.8 | 1893.8 | 1892.8 | 1899.8 | 1903.8 |
| 5° | 1889.8 | 1885.8 | 1884.8 | 1893.8 | 1897.8 |
| 7.5° | 1873.7 | 1870.7 | 1871.7 | 1881.8 | 1886.8 |
| 10° | 1850.7 | 1849.7 | 1851.7 | 1862.7 | 1868.7 |
| 12.5° | 1823.6 | 1822.6 | 1826.6 | 1838.6 | 1846.7 |
| 15° | 1787.5 | 1787.5 | 1793.5 | 1809.5 | 1819.6 |
| 17.5° | 1744.3 | 1747.4 | 1756.4 | 1772.4 | 1783.5 |
| 20° | 1698.2 | 1701.2 | 1713.2 | 1731.3 | 1744.3 |
| 22.5° | 1647.0 | 1651.1 | 1663.1 | 1685.2 | 1696.2 |
| 25° | 1586.9 | 1594.9 | 1608.9 | 1631.0 | 1644.0 |
| 27.5° | 1524.7 | 1533.7 | 1546.7 | 1573.8 | 1585.9 |
| 30° | 1456.5 | 1462.5 | 1481.5 | 1506.6 | 1520.7 |
| 32.5° | 1384.2 | 1390.3 | 1406.3 | 1436.4 | 1448.4 |
| 35° | 1310.0 | 1316.0 | 1331.1 | 1358.2 | 1372.2 |
| 37.5° | 1229.8 | 1234.8 | 1252.8 | 1273.9 | 1288.9 |
| 40° | 1145.5 | 1152.5 | 1164.6 | 1189.6 | 1202.7 |
| 42.5° | 1063.3 | 1066.3 | 1079.3 | 1104.4 | 1114.4 |
| 45° | 979.0 | 980.0 | 994.0 | 1014.1 | 1023.1 |
| 47.5° | 891.7 | 893.7 | 910.8 | 922.8 | 931.9 |
| 50° | 810.5 | 811.5 | 823.5 | 834.6 | 844.6 |
| 52.5° | 729.2 | 729.2 | 735.3 | 747.3 | 760.3 |
| 55° | 653.0 | 652.0 | 655.0 | 666.0 | 674.1 |
| 57.5° | 580.8 | 579.8 | 583.8 | 590.8 | 596.8 |
| 60° | 510.6 | 508.6 | 512.6 | 516.6 | 524.6 |
| 62.5° | 448.4 | 450.4 | 445.4 | 451.4 | 457.4 |
| 65° | 393.2 | 391.2 | 385.2 | 388.2 | 394.2 |
| 67.5° | 346.1 | 343.1 | 333.0 | 335.0 | 342.0 |
| 70° | 302.9 | 296.9 | 285.9 | 285.9 | 290.9 |
| 72.5° | 263.8 | 257.8 | 243.7 | 244.7 | 246.8 |
| 75° | 230.7 | 220.7 | 208.6 | 204.6 | 209.6 |
| 77.5° | 194.6 | 186.6 | 175.5 | 172.5 | 174.5 |
| 80° | 160.5 | 154.5 | 141.4 | 137.4 | 140.4 |
| 82.5° | 127.4 | 122.4 | 107.3 | 104.3 | 105.3 |
| 85° | 88.3 | 87.3 | 75.2 | 69.2 | 71.2 |
| 87.5° | 47.1 | 48.1 | 39.1 | 35.1 | 37.1 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)