

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: P257213

Luminaire Tested: **24GR-LD5-64-F125-UNV-L930-CD1-U**

Issue Date: 3/12/2020

Test Information

Test Method: LM-79-08
Report Number: P257213
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P35585)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/12/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24GR-LD5-64-F125-UNV-L930-CD1-U
Description: METALUX GR 2X4 LED TROFFER WITH F125 LENS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5209.0 lumens
Efficiency: N/A
Efficacy: 108.2 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.18 / 1.26
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

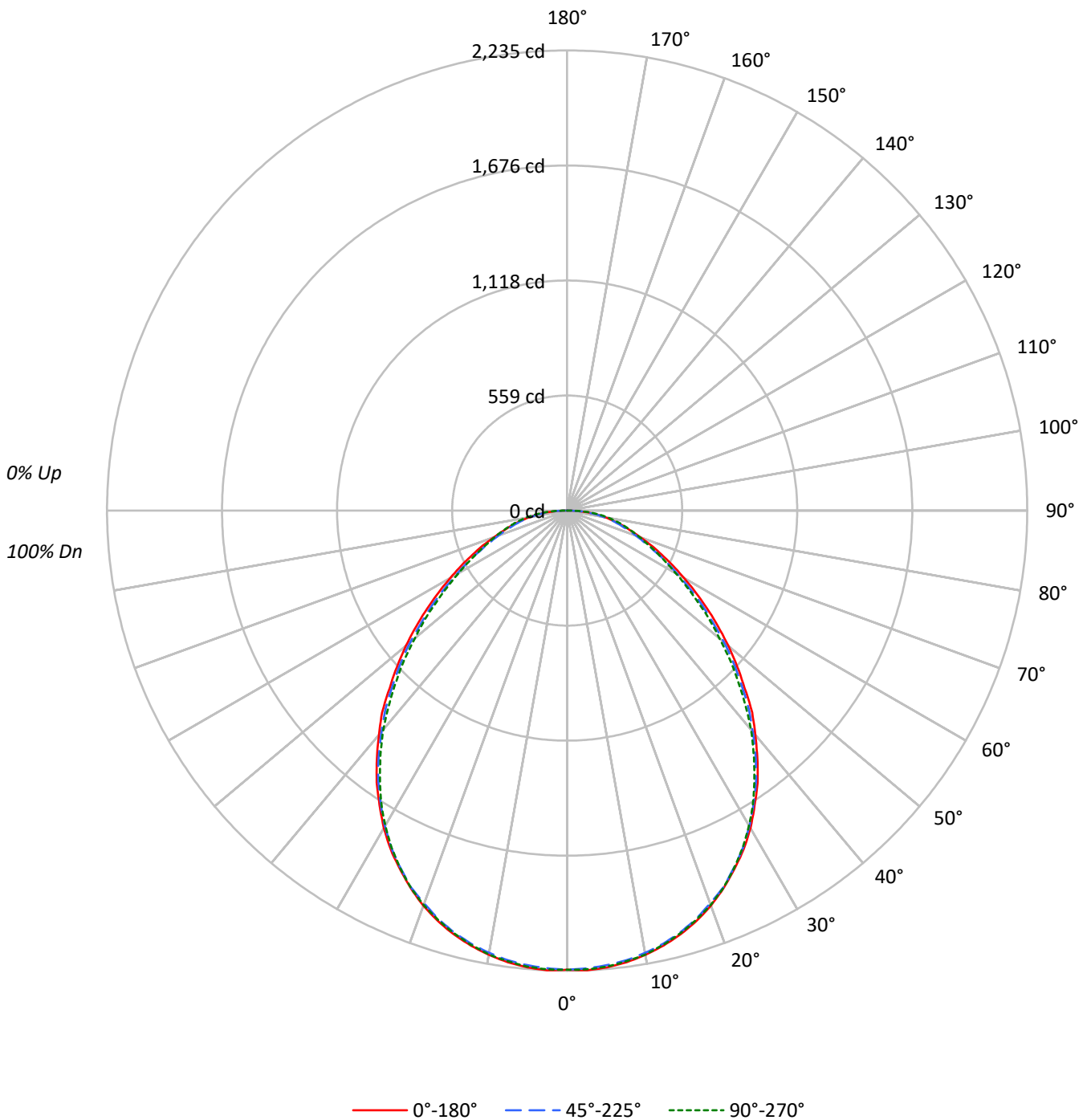
Input Watts (W): 48.149
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





TEST NUMBER: P257213

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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 | 109 | 105 | 101 | 97 | 107 | 103 | 99 | 96 | 98 | 95 | 93 | 94 | 92 | 90 | 91 | 89 | 87 | 85 | | | | | 85 | | | |
| 2 | 100 | 92 | 86 | 80 | 98 | 90 | 85 | 80 | 87 | 82 | 78 | 84 | 80 | 76 | 81 | 77 | 74 | 72 | | | | | 72 | | | |
| 3 | 92 | 82 | 74 | 68 | 89 | 80 | 73 | 67 | 77 | 71 | 66 | 75 | 69 | 65 | 72 | 68 | 64 | 62 | | | | | 62 | | | |
| 4 | 85 | 73 | 65 | 58 | 82 | 72 | 64 | 58 | 69 | 63 | 57 | 67 | 61 | 57 | 65 | 60 | 56 | 54 | | | | | 54 | | | |
| 5 | 78 | 66 | 57 | 51 | 76 | 65 | 57 | 51 | 63 | 56 | 50 | 61 | 55 | 50 | 59 | 54 | 49 | 47 | | | | | 47 | | | |
| 6 | 72 | 60 | 51 | 45 | 71 | 59 | 51 | 45 | 57 | 50 | 44 | 55 | 49 | 44 | 54 | 48 | 44 | 42 | | | | | 42 | | | |
| 7 | 67 | 54 | 46 | 40 | 66 | 54 | 46 | 40 | 52 | 45 | 40 | 51 | 44 | 39 | 49 | 44 | 39 | 37 | | | | | 37 | | | |
| 8 | 63 | 50 | 42 | 36 | 61 | 49 | 41 | 36 | 48 | 41 | 36 | 47 | 40 | 36 | 46 | 40 | 35 | 33 | | | | | 33 | | | |
| 9 | 59 | 46 | 38 | 33 | 58 | 45 | 38 | 33 | 44 | 37 | 32 | 43 | 37 | 32 | 42 | 36 | 32 | 30 | | | | | 30 | | | |
| 10 | 55 | 43 | 35 | 30 | 54 | 42 | 35 | 30 | 41 | 34 | 30 | 40 | 34 | 29 | 39 | 33 | 29 | 28 | | | | | 28 | | | |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|------|------|------|
| 0° | 3416 | 3416 | 3416 |
| 5° | 3424 | 3408 | 3418 |
| 10° | 3408 | 3392 | 3405 |
| 15° | 3379 | 3363 | 3371 |
| 20° | 3329 | 3309 | 3322 |
| 25° | 3248 | 3237 | 3240 |
| 30° | 3149 | 3131 | 3125 |
| 35° | 3015 | 2991 | 2964 |
| 40° | 2842 | 2805 | 2778 |
| 45° | 2641 | 2594 | 2545 |
| 50° | 2434 | 2371 | 2300 |
| 55° | 2213 | 2136 | 2069 |
| 60° | 2005 | 1899 | 1865 |
| 65° | 1833 | 1711 | 1723 |
| 70° | 1686 | 1590 | 1665 |
| 75° | 1640 | 1554 | 1697 |
| 80° | 1643 | 1601 | 1806 |
| 85° | 1807 | 1708 | 1989 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 210.7 | 4.0 |
| 10°-20° | 598.0 | 11.5 |
| 20°-30° | 881.2 | 16.9 |
| 30°-40° | 996.6 | 19.1 |
| 40°-50° | 924.4 | 17.7 |
| 50°-60° | 718.1 | 13.8 |
| 60°-70° | 481.6 | 9.2 |
| 70°-80° | 288.6 | 5.5 |
| 80°-90° | 109.8 | 2.1 |
| 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° | 1690.0 | 32.4 |
| 0°-40° | 2686.5 | 51.6 |
| 0°-60° | 4329.1 | 83.1 |
| 0°-90° | 5209.0 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 5209.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|------|-------|------|-------|------|------|
| 0° | 2230 | 2230 | 2230 | 2230 | 2230 | |
| 5° | 2227 | 2221 | 2217 | 2215 | 2223 | 211 |
| 15° | 2131 | 2122 | 2121 | 2117 | 2126 | 600 |
| 25° | 1922 | 1920 | 1915 | 1912 | 1917 | 885 |
| 35° | 1613 | 1606 | 1600 | 1590 | 1585 | 1005 |
| 45° | 1219 | 1214 | 1197 | 1179 | 1175 | 943 |
| 55° | 829 | 819 | 800 | 780 | 775 | 744 |
| 65° | 506 | 490 | 472 | 471 | 475 | 505 |
| 75° | 277 | 267 | 263 | 275 | 287 | 293 |
| 85° | 103 | 96 | 97 | 114 | 113 | 108 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P257213

CATALOG NUMBER: 24GR-LD5-64-F125-UNV-L930-CD1-U

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|--------|--------|--------|--------|--------|
| 0° | 2230.2 | 2230.2 | 2230.2 | 2230.2 | 2230.2 |
| 2.5° | 2235.1 | 2227.9 | 2224.7 | 2223.0 | 2230.2 |
| 5° | 2227.0 | 2220.6 | 2216.6 | 2215.0 | 2223.0 |
| 7.5° | 2212.6 | 2205.4 | 2202.9 | 2199.7 | 2207.8 |
| 10° | 2191.0 | 2184.5 | 2181.3 | 2178.9 | 2189.3 |
| 12.5° | 2163.7 | 2158.0 | 2154.8 | 2153.2 | 2159.6 |
| 15° | 2130.7 | 2121.8 | 2121.0 | 2117.0 | 2125.8 |
| 17.5° | 2089.7 | 2081.7 | 2080.1 | 2078.5 | 2084.1 |
| 20° | 2042.4 | 2034.3 | 2030.3 | 2029.5 | 2038.4 |
| 22.5° | 1985.3 | 1979.7 | 1981.3 | 1976.4 | 1982.9 |
| 25° | 1921.8 | 1919.5 | 1915.4 | 1912.2 | 1917.1 |
| 27.5° | 1856.0 | 1848.0 | 1848.0 | 1841.6 | 1846.4 |
| 30° | 1780.5 | 1774.9 | 1770.1 | 1763.7 | 1766.9 |
| 32.5° | 1695.4 | 1693.0 | 1685.8 | 1679.4 | 1680.9 |
| 35° | 1612.7 | 1606.2 | 1599.8 | 1590.1 | 1585.4 |
| 37.5° | 1517.9 | 1511.5 | 1503.5 | 1489.8 | 1488.2 |
| 40° | 1421.6 | 1415.9 | 1403.0 | 1388.6 | 1389.4 |
| 42.5° | 1330.0 | 1321.1 | 1305.1 | 1285.8 | 1281.8 |
| 45° | 1219.2 | 1214.3 | 1197.4 | 1179.0 | 1175.0 |
| 47.5° | 1120.4 | 1117.2 | 1096.3 | 1077.0 | 1072.1 |
| 50° | 1021.6 | 1012.7 | 995.1 | 975.8 | 965.4 |
| 52.5° | 924.4 | 913.2 | 890.7 | 877.8 | 873.0 |
| 55° | 828.9 | 819.2 | 799.9 | 779.8 | 775.0 |
| 57.5° | 739.6 | 729.2 | 705.9 | 691.5 | 689.0 |
| 60° | 654.5 | 644.9 | 620.0 | 609.6 | 608.8 |
| 62.5° | 579.1 | 563.0 | 546.1 | 538.9 | 539.7 |
| 65° | 505.9 | 489.9 | 472.2 | 470.6 | 475.4 |
| 67.5° | 441.7 | 424.8 | 407.2 | 413.6 | 418.4 |
| 70° | 376.6 | 364.7 | 355.0 | 365.4 | 371.9 |
| 72.5° | 321.3 | 314.1 | 305.2 | 319.6 | 327.7 |
| 75° | 277.1 | 267.4 | 262.6 | 275.4 | 286.8 |
| 77.5° | 229.7 | 221.6 | 221.6 | 235.3 | 247.4 |
| 80° | 186.3 | 180.7 | 181.5 | 197.5 | 204.8 |
| 82.5° | 146.2 | 138.2 | 138.9 | 159.0 | 163.8 |
| 85° | 102.8 | 96.4 | 97.2 | 114.1 | 113.2 |
| 87.5° | 53.8 | 51.4 | 53.8 | 65.8 | 62.6 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)