

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: P293384

Luminaire Tested: **24GR-LD5-56-F125-UNV-L92765-W2A1-U-5700K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P293384
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33304)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24GR-LD5-56-F125-UNV-L92765-W2A1-U-5700K
Description: GRLED 2x4 TUNABLE WHITE TROFFER
WITH F125 LENS
Light Source: (336) 90 CRI LEDS TUNED TO 5700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5312.0 lumens
Efficiency: N/A
Efficacy: 132.2 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.19 / 1.27
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

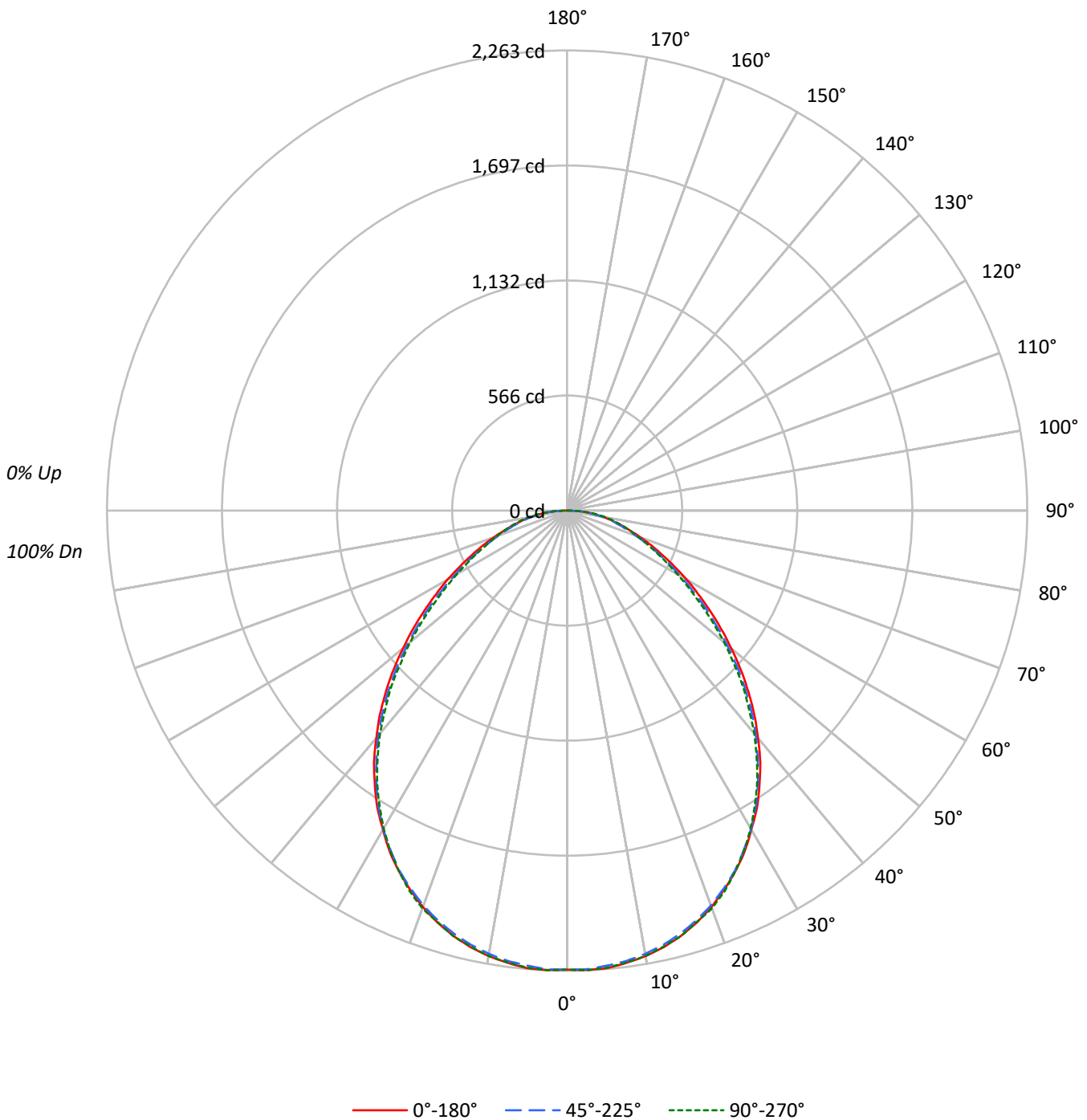
Input Watts (W): 40.176
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





TEST NUMBER: P293384

CATALOG NUMBER: 24GR-LD5-56-F125-UNV-L92765-W2A1-U-5700K

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 | 95 | 92 | 90 | 91 | 89 | 87 | 85 | | | | | 85 | | | |
| 2 | 100 | 92 | 86 | 81 | 98 | 91 | 85 | 80 | 87 | 82 | 78 | 84 | 80 | 76 | 81 | 77 | 74 | 72 | | | | | 72 | | | |
| 3 | 92 | 82 | 74 | 68 | 90 | 80 | 73 | 68 | 78 | 71 | 66 | 75 | 70 | 65 | 72 | 68 | 64 | 62 | | | | | 62 | | | |
| 4 | 85 | 73 | 65 | 59 | 82 | 72 | 64 | 58 | 70 | 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° | 3038 | 3038 | 3038 |
| 5° | 3051 | 3035 | 3047 |
| 10° | 3039 | 3024 | 3038 |
| 15° | 3015 | 2999 | 3018 |
| 20° | 2971 | 2959 | 2981 |
| 25° | 2907 | 2899 | 2905 |
| 30° | 2815 | 2810 | 2803 |
| 35° | 2709 | 2688 | 2677 |
| 40° | 2564 | 2535 | 2514 |
| 45° | 2398 | 2354 | 2326 |
| 50° | 2204 | 2145 | 2108 |
| 55° | 2010 | 1936 | 1879 |
| 60° | 1826 | 1727 | 1682 |
| 65° | 1644 | 1552 | 1525 |
| 70° | 1506 | 1408 | 1447 |
| 75° | 1407 | 1342 | 1442 |
| 80° | 1396 | 1371 | 1506 |
| 85° | 1423 | 1436 | 1641 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 213.7 | 4.0 |
| 10°-20° | 607.4 | 11.4 |
| 20°-30° | 897.4 | 16.9 |
| 30°-40° | 1020.2 | 19.2 |
| 40°-50° | 952.8 | 17.9 |
| 50°-60° | 740.9 | 13.9 |
| 60°-70° | 491.6 | 9.3 |
| 70°-80° | 284.5 | 5.4 |
| 80°-90° | 103.4 | 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° | 1718.5 | 32.4 |
| 0°-40° | 2738.7 | 51.6 |
| 0°-60° | 4432.4 | 83.4 |
| 0°-90° | 5312.0 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 5312.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|------|-------|------|-------|------|------|
| 0° | 2258 | 2258 | 2258 | 2258 | 2258 | |
| 5° | 2259 | 2248 | 2247 | 2251 | 2256 | 214 |
| 15° | 2165 | 2154 | 2153 | 2152 | 2166 | 610 |
| 25° | 1958 | 1950 | 1953 | 1949 | 1957 | 900 |
| 35° | 1649 | 1641 | 1636 | 1625 | 1630 | 1030 |
| 45° | 1260 | 1250 | 1237 | 1221 | 1222 | 971 |
| 55° | 857 | 844 | 825 | 804 | 801 | 768 |
| 65° | 516 | 501 | 487 | 478 | 479 | 516 |
| 75° | 271 | 264 | 258 | 270 | 277 | 290 |
| 85° | 92 | 90 | 93 | 105 | 106 | 100 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



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CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|--------|--------|--------|--------|--------|
| 0° | 2257.6 | 2257.6 | 2257.6 | 2257.6 | 2257.6 |
| 2.5° | 2260.9 | 2254.3 | 2257.6 | 2255.1 | 2262.6 |
| 5° | 2259.3 | 2247.6 | 2246.8 | 2251.0 | 2255.9 |
| 7.5° | 2243.5 | 2231.0 | 2233.5 | 2233.5 | 2241.8 |
| 10° | 2224.4 | 2211.9 | 2213.6 | 2214.4 | 2223.6 |
| 12.5° | 2198.6 | 2186.2 | 2187.0 | 2186.2 | 2195.3 |
| 15° | 2164.6 | 2153.8 | 2153.0 | 2152.2 | 2166.3 |
| 17.5° | 2123.1 | 2108.1 | 2113.1 | 2114.0 | 2121.4 |
| 20° | 2074.9 | 2063.3 | 2066.6 | 2065.8 | 2081.6 |
| 22.5° | 2017.6 | 2009.3 | 2011.8 | 2010.2 | 2025.1 |
| 25° | 1957.9 | 1949.6 | 1952.9 | 1948.7 | 1957.0 |
| 27.5° | 1890.6 | 1884.8 | 1881.5 | 1879.0 | 1884.8 |
| 30° | 1811.7 | 1808.4 | 1808.4 | 1797.6 | 1804.3 |
| 32.5° | 1737.0 | 1726.2 | 1726.2 | 1722.1 | 1717.9 |
| 35° | 1649.0 | 1640.7 | 1636.5 | 1624.9 | 1629.9 |
| 37.5° | 1561.0 | 1541.9 | 1540.2 | 1531.1 | 1531.1 |
| 40° | 1459.7 | 1448.9 | 1443.1 | 1433.1 | 1431.4 |
| 42.5° | 1363.4 | 1352.6 | 1342.6 | 1326.0 | 1322.7 |
| 45° | 1260.4 | 1250.4 | 1237.2 | 1221.4 | 1222.2 |
| 47.5° | 1158.3 | 1144.2 | 1131.7 | 1112.6 | 1110.1 |
| 50° | 1052.8 | 1042.9 | 1024.6 | 1008.0 | 1007.2 |
| 52.5° | 954.0 | 938.2 | 921.6 | 901.7 | 901.7 |
| 55° | 856.9 | 844.4 | 825.3 | 803.7 | 801.2 |
| 57.5° | 763.9 | 752.3 | 730.7 | 714.9 | 710.7 |
| 60° | 678.4 | 661.8 | 641.8 | 628.5 | 625.2 |
| 62.5° | 592.8 | 577.9 | 562.9 | 549.7 | 548.8 |
| 65° | 516.4 | 500.7 | 487.4 | 478.3 | 479.1 |
| 67.5° | 447.5 | 434.2 | 419.3 | 416.8 | 417.6 |
| 70° | 382.8 | 368.7 | 357.9 | 363.7 | 367.8 |
| 72.5° | 321.3 | 313.9 | 306.4 | 314.7 | 320.5 |
| 75° | 270.7 | 264.0 | 258.2 | 269.8 | 277.3 |
| 77.5° | 224.2 | 219.2 | 218.4 | 228.3 | 235.0 |
| 80° | 180.2 | 174.4 | 176.9 | 188.5 | 194.3 |
| 82.5° | 137.0 | 132.8 | 133.7 | 147.8 | 151.9 |
| 85° | 92.2 | 90.5 | 93.0 | 105.4 | 106.3 |
| 87.5° | 49.0 | 49.0 | 50.6 | 58.1 | 55.6 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)