

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: P257217

Luminaire Tested: **24GR-LD5-100-F125-UNV-L930-CD2-U**

Issue Date: 3/12/2020

Test Information

Test Method: LM-79-08
Report Number: P257217
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33304)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/12/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24GR-LD5-100-F125-UNV-L930-CD2-U
Description: METALUX 2X4 GRLED TROFFER
WITH F125 LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7912.2 lumens
Efficiency: N/A
Efficacy: 110.4 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.19 / 1.27
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

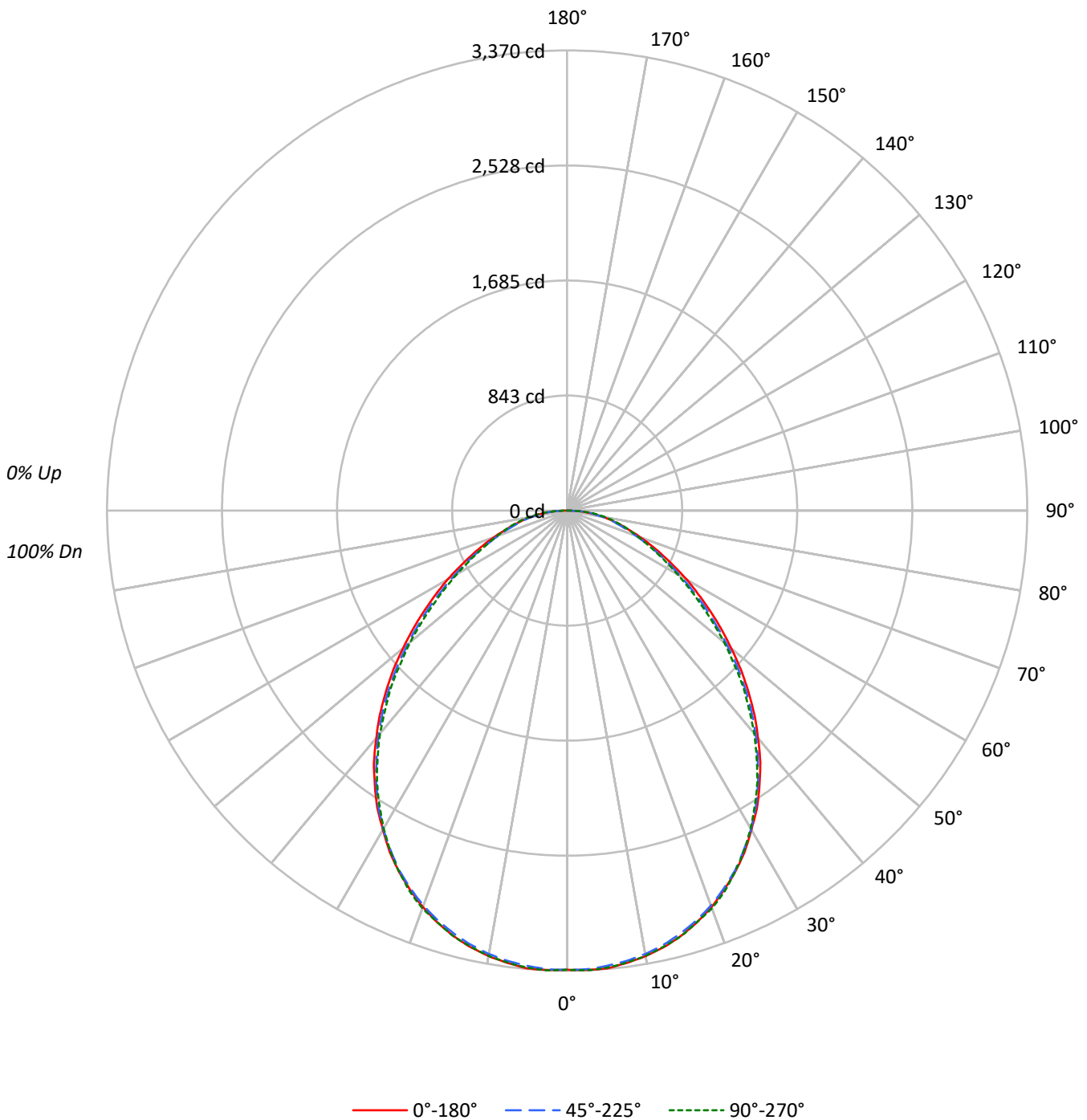
Input Watts (W): 71.7
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P257217

CATALOG NUMBER: 24GR-LD5-100-F125-UNV-L930-CD2-U

Luminous Intensity Polar Plot





TEST NUMBER: P257217

CATALOG NUMBER: 24GR-LD5-100-F125-UNV-L930-CD2-U

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 | | | | |
| 2 | 100 | 92 | 86 | 81 | 98 | 91 | 85 | 80 | 87 | 82 | 78 | 84 | 80 | 76 | 81 | 77 | 74 | | | | | 72 | | | | |
| 3 | 92 | 82 | 74 | 68 | 90 | 80 | 73 | 68 | 78 | 71 | 66 | 75 | 70 | 65 | 72 | 68 | 64 | | | | | 62 | | | | |
| 4 | 85 | 73 | 65 | 59 | 82 | 72 | 64 | 58 | 70 | 63 | 57 | 67 | 61 | 57 | 65 | 60 | 56 | | | | | 54 | | | | |
| 5 | 78 | 66 | 57 | 51 | 76 | 65 | 57 | 51 | 63 | 56 | 50 | 61 | 55 | 50 | 59 | 54 | 49 | | | | | 47 | | | | |
| 6 | 72 | 60 | 51 | 45 | 71 | 59 | 51 | 45 | 57 | 50 | 44 | 55 | 49 | 44 | 54 | 48 | 44 | | | | | 42 | | | | |
| 7 | 67 | 54 | 46 | 40 | 66 | 54 | 46 | 40 | 52 | 45 | 40 | 51 | 44 | 39 | 49 | 44 | 39 | | | | | 37 | | | | |
| 8 | 63 | 50 | 42 | 36 | 61 | 49 | 41 | 36 | 48 | 41 | 36 | 47 | 40 | 36 | 46 | 40 | 35 | | | | | 33 | | | | |
| 9 | 59 | 46 | 38 | 33 | 58 | 45 | 38 | 33 | 44 | 37 | 32 | 43 | 37 | 32 | 42 | 36 | 32 | | | | | 30 | | | | |
| 10 | 55 | 43 | 35 | 30 | 54 | 42 | 35 | 30 | 41 | 34 | 30 | 40 | 34 | 29 | 39 | 33 | 29 | | | | | 28 | | | | |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|------|------|------|
| 0° | 5150 | 5150 | 5150 |
| 5° | 5174 | 5145 | 5166 |
| 10° | 5153 | 5128 | 5151 |
| 15° | 5112 | 5085 | 5116 |
| 20° | 5037 | 5017 | 5054 |
| 25° | 4928 | 4916 | 4926 |
| 30° | 4772 | 4764 | 4753 |
| 35° | 4592 | 4558 | 4539 |
| 40° | 4347 | 4298 | 4263 |
| 45° | 4067 | 3991 | 3943 |
| 50° | 3737 | 3636 | 3575 |
| 55° | 3408 | 3283 | 3187 |
| 60° | 3095 | 2928 | 2853 |
| 65° | 2788 | 2631 | 2586 |
| 70° | 2553 | 2387 | 2453 |
| 75° | 2386 | 2277 | 2444 |
| 80° | 2367 | 2323 | 2553 |
| 85° | 2413 | 2434 | 2782 |



TEST NUMBER: P257217

CATALOG NUMBER: 24GR-LD5-100-F125-UNV-L930-CD2-U

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 318.2 | 4.0 |
| 10°-20° | 904.8 | 11.4 |
| 20°-30° | 1336.6 | 16.9 |
| 30°-40° | 1519.6 | 19.2 |
| 40°-50° | 1419.1 | 17.9 |
| 50°-60° | 1103.6 | 13.9 |
| 60°-70° | 732.3 | 9.3 |
| 70°-80° | 423.8 | 5.4 |
| 80°-90° | 154.1 | 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° | 2559.7 | 32.4 |
| 0°-40° | 4079.3 | 51.6 |
| 0°-60° | 6602.0 | 83.4 |
| 0°-90° | 7912.2 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 7912.2 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|------|-------|------|-------|------|------|
| 0° | 3363 | 3363 | 3363 | 3363 | 3363 | |
| 5° | 3365 | 3348 | 3347 | 3353 | 3360 | 319 |
| 15° | 3224 | 3208 | 3207 | 3206 | 3227 | 908 |
| 25° | 2916 | 2904 | 2909 | 2903 | 2915 | 1341 |
| 35° | 2456 | 2444 | 2438 | 2420 | 2428 | 1533 |
| 45° | 1877 | 1862 | 1843 | 1819 | 1820 | 1447 |
| 55° | 1276 | 1258 | 1229 | 1197 | 1193 | 1145 |
| 65° | 769 | 746 | 726 | 712 | 714 | 769 |
| 75° | 403 | 393 | 385 | 402 | 413 | 431 |
| 85° | 137 | 135 | 138 | 157 | 158 | 149 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P257217

CATALOG NUMBER: 24GR-LD5-100-F125-UNV-L930-CD2-U

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|--------|--------|--------|--------|--------|
| 0° | 3362.7 | 3362.7 | 3362.7 | 3362.7 | 3362.7 |
| 2.5° | 3367.7 | 3357.7 | 3362.7 | 3359.0 | 3370.1 |
| 5° | 3365.1 | 3347.8 | 3346.6 | 3352.8 | 3360.2 |
| 7.5° | 3341.7 | 3323.1 | 3326.8 | 3326.8 | 3339.2 |
| 10° | 3313.2 | 3294.7 | 3297.1 | 3298.4 | 3312.0 |
| 12.5° | 3274.8 | 3256.3 | 3257.5 | 3256.3 | 3269.9 |
| 15° | 3224.2 | 3208.1 | 3206.9 | 3205.6 | 3226.6 |
| 17.5° | 3162.3 | 3140.0 | 3147.5 | 3148.7 | 3159.9 |
| 20° | 3090.6 | 3073.3 | 3078.2 | 3077.0 | 3100.5 |
| 22.5° | 3005.3 | 2992.9 | 2996.6 | 2994.1 | 3016.4 |
| 25° | 2916.2 | 2903.9 | 2908.8 | 2902.6 | 2915.0 |
| 27.5° | 2816.0 | 2807.4 | 2802.4 | 2798.7 | 2807.4 |
| 30° | 2698.5 | 2693.6 | 2693.6 | 2677.5 | 2687.4 |
| 32.5° | 2587.3 | 2571.2 | 2571.2 | 2565.0 | 2558.8 |
| 35° | 2456.1 | 2443.8 | 2437.6 | 2420.3 | 2427.7 |
| 37.5° | 2325.0 | 2296.6 | 2294.1 | 2280.5 | 2280.5 |
| 40° | 2174.1 | 2158.1 | 2149.5 | 2134.6 | 2132.2 |
| 42.5° | 2030.7 | 2014.7 | 1999.8 | 1975.1 | 1970.1 |
| 45° | 1877.4 | 1862.5 | 1842.7 | 1819.3 | 1820.5 |
| 47.5° | 1725.3 | 1704.2 | 1685.7 | 1657.2 | 1653.5 |
| 50° | 1568.2 | 1553.3 | 1526.1 | 1501.4 | 1500.2 |
| 52.5° | 1421.0 | 1397.5 | 1372.8 | 1343.1 | 1343.1 |
| 55° | 1276.3 | 1257.7 | 1229.3 | 1197.1 | 1193.4 |
| 57.5° | 1137.8 | 1120.4 | 1088.3 | 1064.9 | 1058.6 |
| 60° | 1010.4 | 985.6 | 956.0 | 936.2 | 931.3 |
| 62.5° | 883.1 | 860.8 | 838.5 | 818.7 | 817.5 |
| 65° | 769.2 | 745.8 | 725.9 | 712.3 | 713.6 |
| 67.5° | 666.6 | 646.8 | 624.5 | 620.8 | 622.1 |
| 70° | 570.1 | 549.1 | 533.0 | 541.7 | 547.8 |
| 72.5° | 478.6 | 467.5 | 456.3 | 468.7 | 477.4 |
| 75° | 403.2 | 393.3 | 384.7 | 402.0 | 413.0 |
| 77.5° | 333.9 | 326.5 | 325.3 | 340.1 | 350.0 |
| 80° | 268.4 | 259.7 | 263.4 | 280.8 | 289.4 |
| 82.5° | 204.1 | 197.9 | 199.1 | 220.2 | 226.3 |
| 85° | 137.3 | 134.8 | 138.5 | 157.0 | 158.3 |
| 87.5° | 73.0 | 73.0 | 75.4 | 86.6 | 82.9 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)