

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: P476382

Luminaire Tested: **14GR-LD5-43-FGW080-UNV-L850-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P476382
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 14GR-LD5-43-FGW080-UNV-L850-CD1-U
Description: GR 1'X4' LED TROFFER w/ FGW080 LENS
Light Source: 5000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3755.0 lumens
Efficiency: N/A
Efficacy: 113.8 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.36
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

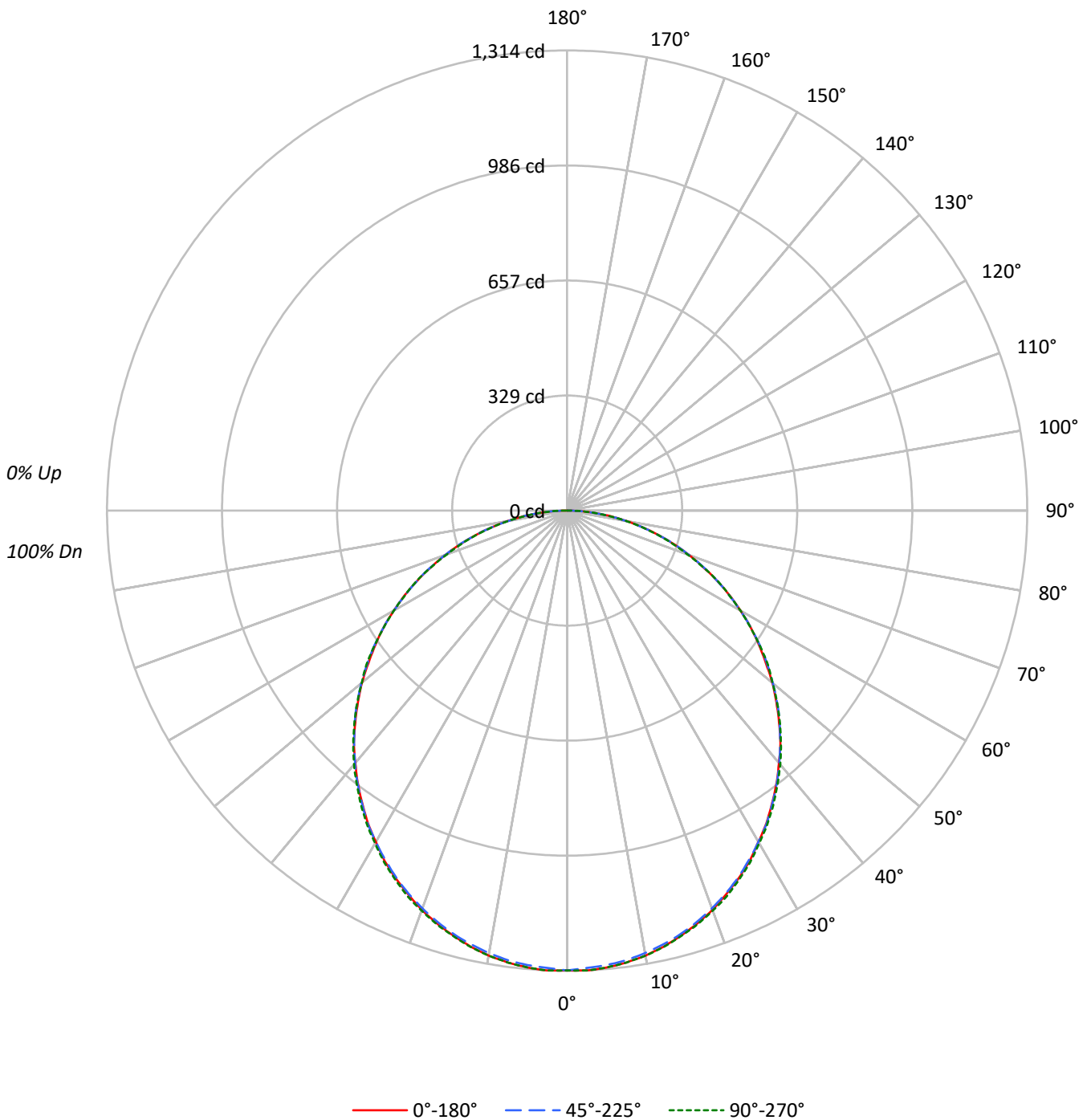
Input Watts (W): 33
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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 | 108 | 103 | 99 | 95 | 106 | 101 | 97 | 93 | 97 | 94 | 91 | 93 | 90 | 88 | 89 | 87 | 85 | 83 |
| 2 | 98 | 90 | 83 | 77 | 96 | 88 | 82 | 76 | 84 | 79 | 74 | 81 | 77 | 73 | 78 | 74 | 71 | 69 |
| 3 | 90 | 79 | 71 | 64 | 87 | 77 | 70 | 63 | 74 | 68 | 62 | 71 | 66 | 61 | 69 | 64 | 60 | 58 |
| 4 | 82 | 70 | 61 | 54 | 80 | 68 | 60 | 54 | 66 | 59 | 53 | 64 | 57 | 52 | 61 | 56 | 51 | 49 |
| 5 | 75 | 62 | 53 | 46 | 73 | 61 | 53 | 46 | 59 | 51 | 46 | 57 | 50 | 45 | 55 | 49 | 45 | 42 |
| 6 | 70 | 56 | 47 | 40 | 68 | 55 | 47 | 40 | 53 | 46 | 40 | 52 | 45 | 40 | 50 | 44 | 39 | 37 |
| 7 | 64 | 51 | 42 | 36 | 63 | 50 | 42 | 36 | 48 | 41 | 35 | 47 | 40 | 35 | 46 | 39 | 35 | 33 |
| 8 | 60 | 46 | 38 | 32 | 58 | 46 | 37 | 32 | 44 | 37 | 32 | 43 | 36 | 31 | 42 | 36 | 31 | 29 |
| 9 | 56 | 43 | 34 | 29 | 55 | 42 | 34 | 29 | 41 | 34 | 28 | 40 | 33 | 28 | 39 | 33 | 28 | 26 |
| 10 | 53 | 39 | 31 | 26 | 51 | 39 | 31 | 26 | 38 | 31 | 26 | 37 | 30 | 26 | 36 | 30 | 26 | 24 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|------|------|------|
| 0° | 3534 | 3534 | 3534 |
| 5° | 3537 | 3518 | 3537 |
| 10° | 3526 | 3506 | 3526 |
| 15° | 3501 | 3488 | 3504 |
| 20° | 3475 | 3462 | 3482 |
| 25° | 3439 | 3432 | 3450 |
| 30° | 3394 | 3394 | 3409 |
| 35° | 3352 | 3356 | 3371 |
| 40° | 3306 | 3310 | 3327 |
| 45° | 3257 | 3266 | 3271 |
| 50° | 3201 | 3211 | 3206 |
| 55° | 3137 | 3154 | 3148 |
| 60° | 3075 | 3075 | 3075 |
| 65° | 3005 | 3005 | 3018 |
| 70° | 2909 | 2909 | 2880 |
| 75° | 2807 | 2795 | 2782 |
| 80° | 2681 | 2662 | 2644 |
| 85° | 2516 | 2489 | 2411 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 124.2 | 3.3 |
| 10°-20° | 354.4 | 9.4 |
| 20°-30° | 534.1 | 14.2 |
| 30°-40° | 640.0 | 17.0 |
| 40°-50° | 661.8 | 17.6 |
| 50°-60° | 600.1 | 16.0 |
| 60°-70° | 466.4 | 12.4 |
| 70°-80° | 284.8 | 7.6 |
| 80°-90° | 89.2 | 2.4 |
| 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° | 1012.7 | 27.0 |
| 0°-40° | 1652.7 | 44.0 |
| 0°-60° | 2914.6 | 77.6 |
| 0°-90° | 3755.0 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 3755.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|------|-------|------|-------|------|------|
| 0° | 1313 | 1313 | 1313 | 1313 | 1313 | |
| 5° | 1310 | 1308 | 1302 | 1308 | 1310 | 124 |
| 15° | 1257 | 1257 | 1252 | 1258 | 1258 | 355 |
| 25° | 1158 | 1158 | 1156 | 1163 | 1162 | 534 |
| 35° | 1020 | 1022 | 1022 | 1026 | 1026 | 639 |
| 45° | 856 | 857 | 858 | 860 | 860 | 660 |
| 55° | 669 | 671 | 672 | 672 | 671 | 598 |
| 65° | 472 | 472 | 472 | 469 | 474 | 466 |
| 75° | 270 | 270 | 269 | 268 | 268 | 286 |
| 85° | 82 | 79 | 81 | 78 | 78 | 90 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P476382

CATALOG NUMBER: 14GR-LD5-43-FGW080-UNV-L850-CD1-U

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|--------|--------|--------|--------|--------|
| 0° | 1313.2 | 1313.2 | 1313.2 | 1313.2 | 1313.2 |
| 2.5° | 1314.4 | 1313.2 | 1307.1 | 1313.2 | 1314.4 |
| 5° | 1309.5 | 1308.3 | 1302.5 | 1308.3 | 1309.5 |
| 7.5° | 1301.3 | 1301.3 | 1295.2 | 1301.3 | 1301.3 |
| 10° | 1290.4 | 1289.2 | 1283.1 | 1289.2 | 1290.4 |
| 12.5° | 1274.9 | 1274.9 | 1268.8 | 1274.9 | 1276.1 |
| 15° | 1256.6 | 1256.6 | 1252.1 | 1257.8 | 1257.8 |
| 17.5° | 1236.3 | 1237.5 | 1231.7 | 1238.7 | 1238.7 |
| 20° | 1213.5 | 1212.2 | 1208.9 | 1214.7 | 1215.9 |
| 22.5° | 1186.1 | 1187.3 | 1183.7 | 1190.6 | 1191.9 |
| 25° | 1158.4 | 1158.4 | 1156.0 | 1163.3 | 1162.1 |
| 27.5° | 1128.3 | 1128.3 | 1124.7 | 1130.7 | 1132.0 |
| 30° | 1092.4 | 1093.7 | 1092.4 | 1098.2 | 1097.0 |
| 32.5° | 1058.7 | 1059.9 | 1059.9 | 1062.3 | 1063.6 |
| 35° | 1020.4 | 1021.6 | 1021.6 | 1026.2 | 1026.2 |
| 37.5° | 981.8 | 981.8 | 983.0 | 986.6 | 986.6 |
| 40° | 941.0 | 942.2 | 942.2 | 945.9 | 947.1 |
| 42.5° | 901.5 | 899.1 | 900.3 | 903.9 | 903.9 |
| 45° | 855.9 | 857.1 | 858.3 | 859.5 | 859.5 |
| 47.5° | 810.3 | 812.7 | 813.9 | 815.1 | 813.9 |
| 50° | 764.7 | 767.1 | 767.1 | 765.9 | 765.9 |
| 52.5° | 715.4 | 721.5 | 720.3 | 720.3 | 722.7 |
| 55° | 668.6 | 671.0 | 672.2 | 672.2 | 671.0 |
| 57.5° | 621.8 | 624.2 | 621.8 | 623.0 | 620.6 |
| 60° | 571.3 | 572.5 | 571.3 | 571.3 | 571.3 |
| 62.5° | 522.0 | 523.3 | 520.8 | 520.8 | 520.8 |
| 65° | 471.9 | 471.9 | 471.9 | 469.4 | 474.0 |
| 67.5° | 419.0 | 421.4 | 421.4 | 422.6 | 417.8 |
| 70° | 369.7 | 370.9 | 369.7 | 368.5 | 366.1 |
| 72.5° | 320.5 | 321.7 | 322.9 | 318.0 | 316.8 |
| 75° | 270.0 | 270.0 | 268.8 | 267.6 | 267.6 |
| 77.5° | 220.7 | 220.7 | 220.7 | 218.6 | 218.6 |
| 80° | 173.0 | 173.9 | 171.8 | 171.8 | 170.6 |
| 82.5° | 126.2 | 126.2 | 126.2 | 125.0 | 122.5 |
| 85° | 81.5 | 79.4 | 80.6 | 78.1 | 78.1 |
| 87.5° | 37.1 | 37.1 | 37.1 | 34.7 | 39.5 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)