

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: P292434

Luminaire Tested: **22GR-LD5-32-A125-UNV-L93050-W2A1-U-3000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P292434
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33297)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22GR-LD5-32-A125-UNV-L93050-W2A1-U-3000K
Description: GRLED 2x2 TUNABLE WHITE TROFFER
WITH A125 LENS
Light Source: (168) 90 CRI LEDS TUNED TO 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2495.0 lumens
Efficiency: N/A
Efficacy: 99.4 lumens/watt
Spacing Criteria (0/90/45): 1.15 / 1.22 / 1.24
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

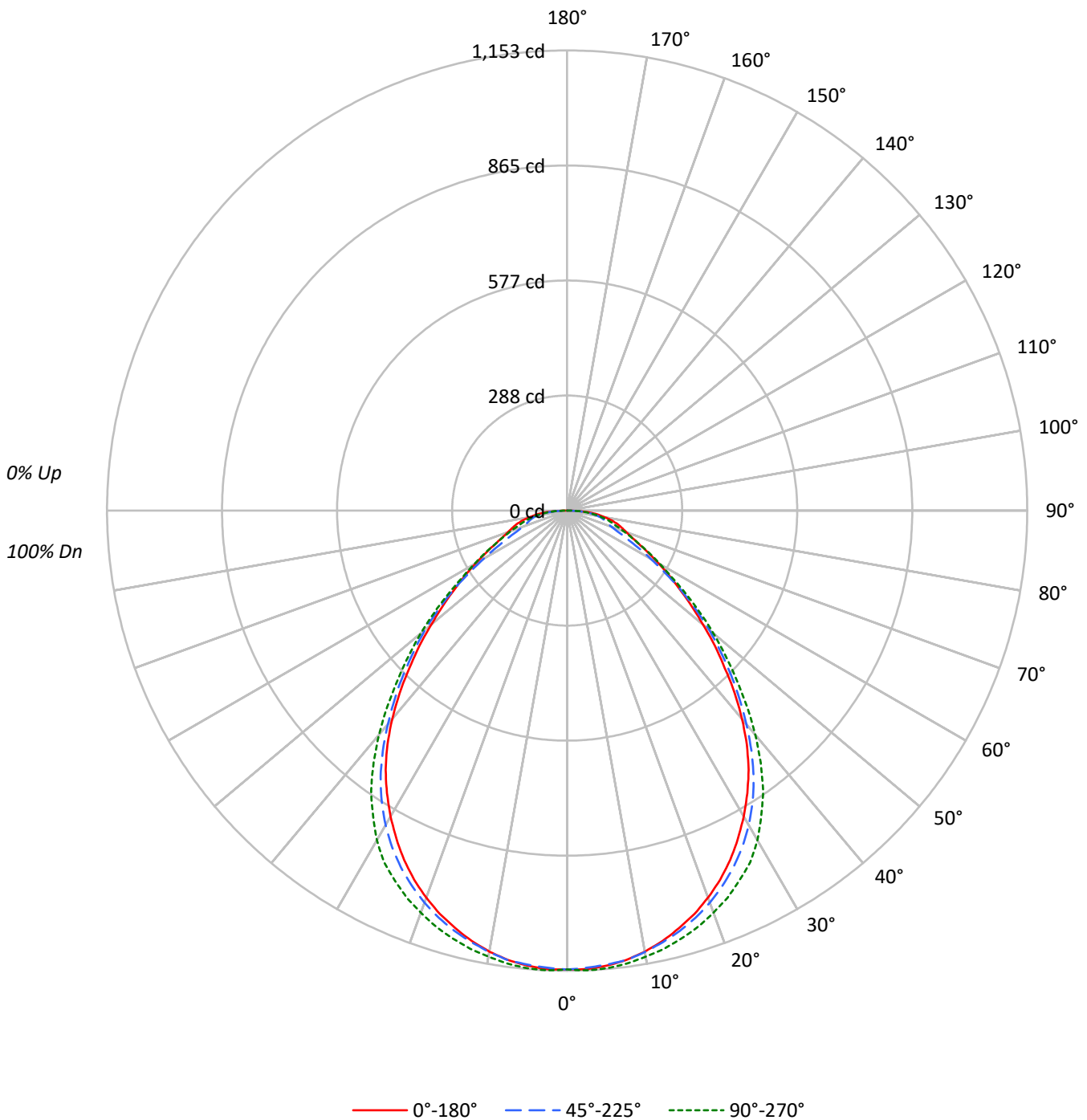
Input Watts (W): 25.11
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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 | 110 | 105 | 102 | 98 | 107 | 103 | 100 | 96 | 99 | 96 | 93 | 95 | 93 | 91 | 92 | 90 | 88 | 86 |
| 2 | 101 | 94 | 87 | 82 | 98 | 92 | 86 | 81 | 88 | 83 | 79 | 85 | 81 | 78 | 82 | 79 | 76 | 74 |
| 3 | 93 | 83 | 76 | 70 | 91 | 82 | 75 | 69 | 79 | 73 | 68 | 76 | 71 | 67 | 74 | 70 | 66 | 64 |
| 4 | 86 | 75 | 67 | 61 | 84 | 74 | 66 | 60 | 71 | 65 | 59 | 69 | 63 | 59 | 67 | 62 | 58 | 56 |
| 5 | 80 | 68 | 59 | 53 | 78 | 67 | 59 | 53 | 65 | 58 | 52 | 63 | 57 | 52 | 61 | 56 | 51 | 49 |
| 6 | 74 | 61 | 53 | 47 | 72 | 61 | 53 | 47 | 59 | 52 | 47 | 57 | 51 | 46 | 56 | 50 | 46 | 44 |
| 7 | 69 | 56 | 48 | 42 | 67 | 55 | 48 | 42 | 54 | 47 | 42 | 52 | 46 | 41 | 51 | 46 | 41 | 39 |
| 8 | 64 | 52 | 44 | 38 | 63 | 51 | 43 | 38 | 50 | 43 | 38 | 48 | 42 | 38 | 47 | 42 | 37 | 36 |
| 9 | 60 | 48 | 40 | 35 | 59 | 47 | 40 | 34 | 46 | 39 | 34 | 45 | 39 | 34 | 44 | 38 | 34 | 32 |
| 10 | 57 | 44 | 37 | 32 | 55 | 44 | 36 | 32 | 43 | 36 | 31 | 42 | 36 | 31 | 41 | 35 | 31 | 29 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|------|------|------|
| 0° | 3095 | 3095 | 3095 |
| 5° | 3092 | 3085 | 3110 |
| 10° | 3066 | 3069 | 3101 |
| 15° | 3018 | 3039 | 3091 |
| 20° | 2955 | 2994 | 3070 |
| 25° | 2869 | 2928 | 3035 |
| 30° | 2749 | 2827 | 2962 |
| 35° | 2605 | 2677 | 2813 |
| 40° | 2395 | 2454 | 2577 |
| 45° | 2127 | 2205 | 2285 |
| 50° | 1858 | 1943 | 2002 |
| 55° | 1616 | 1637 | 1697 |
| 60° | 1421 | 1302 | 1449 |
| 65° | 1263 | 1041 | 1270 |
| 70° | 1240 | 924 | 1172 |
| 75° | 1355 | 1016 | 1198 |
| 80° | 1488 | 1209 | 1280 |
| 85° | 1778 | 1402 | 1436 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 108.7 | 4.4 |
| 10°-20° | 308.2 | 12.4 |
| 20°-30° | 455.0 | 18.2 |
| 30°-40° | 509.2 | 20.4 |
| 40°-50° | 447.1 | 17.9 |
| 50°-60° | 316.4 | 12.7 |
| 60°-70° | 184.2 | 7.4 |
| 70°-80° | 114.8 | 4.6 |
| 80°-90° | 51.4 | 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° | 872.0 | 34.9 |
| 0°-40° | 1381.2 | 55.4 |
| 0°-60° | 2144.7 | 86.0 |
| 0°-90° | 2495.0 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 2495.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|------|-------|------|-------|------|------|
| 0° | 1150 | 1150 | 1150 | 1150 | 1150 | |
| 5° | 1145 | 1142 | 1142 | 1148 | 1151 | 109 |
| 15° | 1083 | 1086 | 1091 | 1102 | 1109 | 305 |
| 25° | 966 | 970 | 986 | 1009 | 1022 | 444 |
| 35° | 793 | 796 | 815 | 839 | 856 | 493 |
| 45° | 559 | 565 | 579 | 593 | 600 | 432 |
| 55° | 344 | 351 | 349 | 355 | 362 | 311 |
| 65° | 198 | 183 | 164 | 178 | 200 | 201 |
| 75° | 130 | 112 | 98 | 100 | 115 | 136 |
| 85° | 58 | 60 | 45 | 44 | 46 | 58 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



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CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|--------|--------|--------|--------|--------|
| 0° | 1150.1 | 1150.1 | 1150.1 | 1150.1 | 1150.1 |
| 2.5° | 1150.1 | 1147.7 | 1146.6 | 1150.7 | 1153.0 |
| 5° | 1144.8 | 1141.9 | 1141.9 | 1147.7 | 1151.2 |
| 7.5° | 1135.5 | 1132.6 | 1136.1 | 1141.3 | 1144.8 |
| 10° | 1122.1 | 1121.0 | 1123.3 | 1130.3 | 1134.9 |
| 12.5° | 1104.7 | 1105.3 | 1107.6 | 1118.7 | 1124.5 |
| 15° | 1083.2 | 1085.5 | 1090.7 | 1102.4 | 1109.4 |
| 17.5° | 1059.9 | 1061.6 | 1069.8 | 1083.2 | 1093.1 |
| 20° | 1032.0 | 1035.5 | 1045.4 | 1062.2 | 1072.1 |
| 22.5° | 1001.1 | 1005.2 | 1017.4 | 1037.8 | 1050.0 |
| 25° | 966.2 | 970.3 | 986.0 | 1009.3 | 1022.1 |
| 27.5° | 926.7 | 933.1 | 950.5 | 976.1 | 993.6 |
| 30° | 884.8 | 890.0 | 909.8 | 938.9 | 953.4 |
| 32.5° | 840.0 | 846.4 | 865.0 | 892.9 | 905.7 |
| 35° | 792.9 | 796.4 | 815.0 | 839.4 | 856.3 |
| 37.5° | 739.4 | 741.1 | 758.6 | 781.3 | 796.4 |
| 40° | 681.8 | 682.9 | 698.7 | 720.2 | 733.6 |
| 42.5° | 621.9 | 622.4 | 639.3 | 655.6 | 667.2 |
| 45° | 559.0 | 565.4 | 579.4 | 593.4 | 600.3 |
| 47.5° | 502.6 | 507.3 | 520.1 | 532.3 | 538.7 |
| 50° | 443.9 | 455.5 | 464.2 | 470.6 | 478.2 |
| 52.5° | 393.2 | 403.1 | 405.5 | 413.0 | 419.4 |
| 55° | 344.4 | 351.4 | 349.0 | 355.4 | 361.8 |
| 57.5° | 303.1 | 299.6 | 292.0 | 303.1 | 311.2 |
| 60° | 264.1 | 254.8 | 242.0 | 257.1 | 269.3 |
| 62.5° | 229.2 | 214.1 | 198.4 | 213.5 | 233.9 |
| 65° | 198.4 | 182.7 | 163.5 | 178.0 | 199.5 |
| 67.5° | 175.1 | 158.8 | 136.1 | 150.7 | 172.2 |
| 70° | 157.6 | 140.8 | 117.5 | 129.7 | 148.9 |
| 72.5° | 143.7 | 125.7 | 105.3 | 113.4 | 129.7 |
| 75° | 130.3 | 112.3 | 97.7 | 100.1 | 115.2 |
| 77.5° | 114.6 | 101.2 | 89.6 | 88.4 | 100.1 |
| 80° | 96.0 | 91.9 | 78.0 | 76.2 | 82.6 |
| 82.5° | 79.1 | 77.4 | 64.0 | 62.2 | 64.6 |
| 85° | 57.6 | 59.9 | 45.4 | 44.2 | 46.5 |
| 87.5° | 30.2 | 33.2 | 23.9 | 25.0 | 25.6 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)