

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: P292395

Luminaire Tested: **22GR-LD5-36-A125-UNV-L82765-W2A1-U-4000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P292395
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-LD5-36-A125-UNV-L82765-W2A1-U-4000K
Description: GRLED 2x2 TUNABLE WHITE TROFFER
WITH A125 LENS
Light Source: (168) 80 CRI LEDS TUNED TO 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3594.0 lumens
Efficiency: N/A
Efficacy: 126.3 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

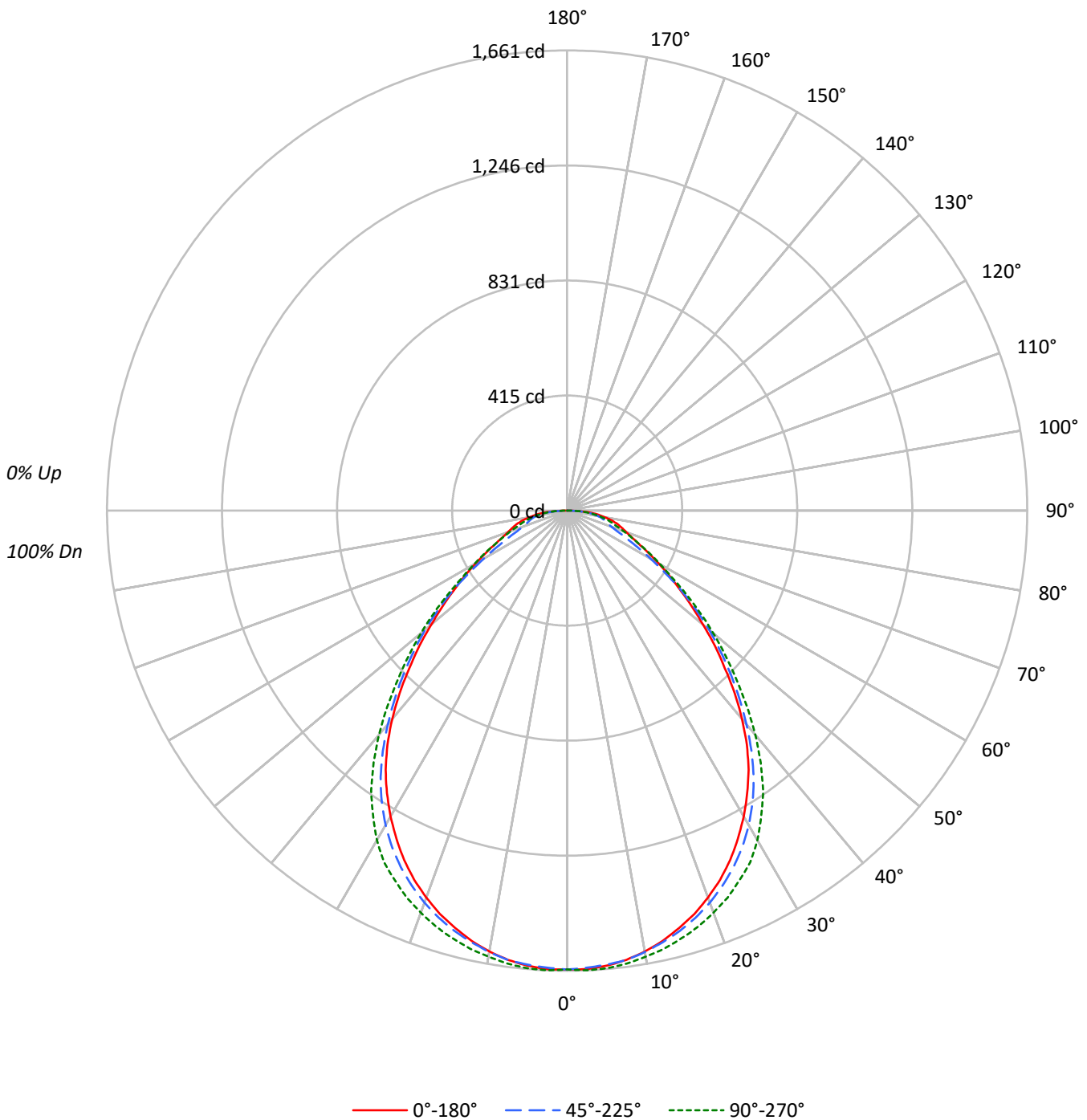
Input Watts (W): 28.458
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|------|------|------|
| 0° | 4458 | 4458 | 4458 |
| 5° | 4455 | 4443 | 4479 |
| 10° | 4417 | 4421 | 4467 |
| 15° | 4347 | 4377 | 4452 |
| 20° | 4257 | 4312 | 4423 |
| 25° | 4133 | 4217 | 4372 |
| 30° | 3960 | 4072 | 4268 |
| 35° | 3752 | 3857 | 4052 |
| 40° | 3450 | 3535 | 3712 |
| 45° | 3065 | 3176 | 3291 |
| 50° | 2677 | 2799 | 2884 |
| 55° | 2327 | 2359 | 2445 |
| 60° | 2047 | 1876 | 2088 |
| 65° | 1819 | 1500 | 1830 |
| 70° | 1787 | 1332 | 1688 |
| 75° | 1952 | 1464 | 1725 |
| 80° | 2143 | 1740 | 1844 |
| 85° | 2563 | 2019 | 2069 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 156.6 | 4.4 |
| 10°-20° | 444.0 | 12.4 |
| 20°-30° | 655.5 | 18.2 |
| 30°-40° | 733.5 | 20.4 |
| 40°-50° | 644.1 | 17.9 |
| 50°-60° | 455.8 | 12.7 |
| 60°-70° | 265.3 | 7.4 |
| 70°-80° | 165.3 | 4.6 |
| 80°-90° | 74.0 | 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° | 1256.1 | 34.9 |
| 0°-40° | 1989.5 | 55.4 |
| 0°-60° | 3089.4 | 86.0 |
| 0°-90° | 3594.0 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 3594.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|------|-------|------|-------|------|------|
| 0° | 1657 | 1657 | 1657 | 1657 | 1657 | |
| 5° | 1649 | 1645 | 1645 | 1653 | 1658 | 156 |
| 15° | 1560 | 1564 | 1571 | 1588 | 1598 | 440 |
| 25° | 1392 | 1398 | 1420 | 1454 | 1472 | 639 |
| 35° | 1142 | 1147 | 1174 | 1209 | 1234 | 710 |
| 45° | 805 | 814 | 835 | 855 | 865 | 623 |
| 55° | 496 | 506 | 503 | 512 | 521 | 448 |
| 65° | 286 | 263 | 236 | 256 | 287 | 290 |
| 75° | 188 | 162 | 141 | 144 | 166 | 196 |
| 85° | 83 | 86 | 65 | 64 | 67 | 84 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P292395

CATALOG NUMBER: 22GR-LD5-36-A125-UNV-L82765-W2A1-U-4000K

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|--------|--------|--------|--------|--------|
| 0° | 1656.7 | 1656.7 | 1656.7 | 1656.7 | 1656.7 |
| 2.5° | 1656.7 | 1653.3 | 1651.6 | 1657.5 | 1660.8 |
| 5° | 1649.1 | 1644.9 | 1644.9 | 1653.3 | 1658.3 |
| 7.5° | 1635.7 | 1631.5 | 1636.5 | 1644.1 | 1649.1 |
| 10° | 1616.4 | 1614.8 | 1618.1 | 1628.2 | 1634.9 |
| 12.5° | 1591.3 | 1592.1 | 1595.5 | 1611.4 | 1619.8 |
| 15° | 1560.3 | 1563.6 | 1571.2 | 1587.9 | 1598.0 |
| 17.5° | 1526.8 | 1529.3 | 1541.0 | 1560.3 | 1574.5 |
| 20° | 1486.5 | 1491.6 | 1505.8 | 1530.1 | 1544.4 |
| 22.5° | 1442.1 | 1448.0 | 1465.6 | 1494.9 | 1512.5 |
| 25° | 1391.9 | 1397.7 | 1420.3 | 1453.9 | 1472.3 |
| 27.5° | 1334.9 | 1344.1 | 1369.2 | 1406.1 | 1431.2 |
| 30° | 1274.5 | 1282.1 | 1310.6 | 1352.5 | 1373.4 |
| 32.5° | 1210.0 | 1219.2 | 1246.1 | 1286.3 | 1304.7 |
| 35° | 1142.1 | 1147.2 | 1174.0 | 1209.2 | 1233.5 |
| 37.5° | 1065.1 | 1067.6 | 1092.7 | 1125.4 | 1147.2 |
| 40° | 982.1 | 983.8 | 1006.4 | 1037.4 | 1056.7 |
| 42.5° | 895.8 | 896.6 | 920.9 | 944.4 | 961.1 |
| 45° | 805.3 | 814.5 | 834.6 | 854.7 | 864.8 |
| 47.5° | 724.0 | 730.7 | 749.1 | 766.7 | 776.0 |
| 50° | 639.4 | 656.1 | 668.7 | 677.9 | 688.8 |
| 52.5° | 566.5 | 580.7 | 584.1 | 595.0 | 604.2 |
| 55° | 496.1 | 506.1 | 502.8 | 512.0 | 521.2 |
| 57.5° | 436.6 | 431.6 | 420.7 | 436.6 | 448.3 |
| 60° | 380.4 | 367.0 | 348.6 | 370.4 | 388.0 |
| 62.5° | 330.2 | 308.4 | 285.7 | 307.5 | 336.9 |
| 65° | 285.7 | 263.1 | 235.5 | 256.4 | 287.4 |
| 67.5° | 252.2 | 228.8 | 196.1 | 217.0 | 248.0 |
| 70° | 227.1 | 202.8 | 169.3 | 186.9 | 214.5 |
| 72.5° | 207.0 | 181.0 | 151.7 | 163.4 | 186.9 |
| 75° | 187.7 | 161.7 | 140.8 | 144.1 | 165.9 |
| 77.5° | 165.1 | 145.8 | 129.0 | 127.4 | 144.1 |
| 80° | 138.3 | 132.4 | 112.3 | 109.8 | 119.0 |
| 82.5° | 114.0 | 111.4 | 92.2 | 89.7 | 93.0 |
| 85° | 83.0 | 86.3 | 65.4 | 63.7 | 67.0 |
| 87.5° | 43.6 | 47.8 | 34.4 | 36.0 | 36.9 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)