

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: P291175

Luminaire Tested: **14GR-LD5-43-A125-UNV-L83050-W2A1-U-3000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P291175
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33315)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 14GR-LD5-43-A125-UNV-L83050-W2A1-U-3000K
Description: GRLED 1x4 TUNABLE WHITE TROFFER
WITH A125 LENS
Light Source: (168) 80 CRI LEDS TUNED TO 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4171.0 lumens
Efficiency: N/A
Efficacy: 114.4 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.21 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

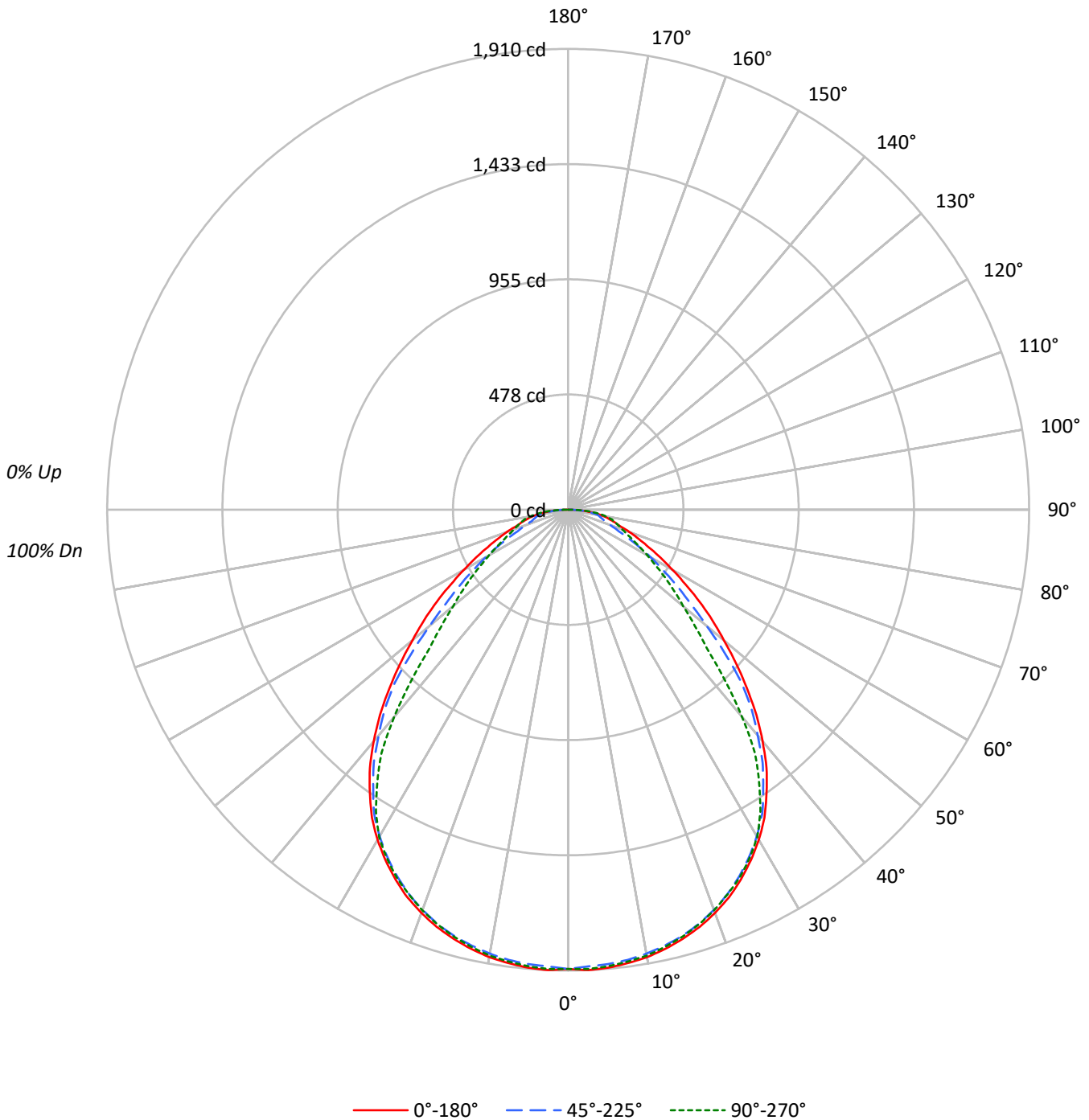
Input Watts (W): 36.456
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P291175

CATALOG NUMBER: 14GR-LD5-43-A125-UNV-L83050-W2A1-U-3000K

Luminous Intensity Polar Plot





TEST NUMBER: P291175

CATALOG NUMBER: 14GR-LD5-43-A125-UNV-L83050-W2A1-U-3000K

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 | 106 | 102 | 98 | 107 | 103 | 100 | 97 | 99 | 96 | 94 | 95 | 93 | 91 | 92 | 90 | 88 | 86 |
| 2 | 101 | 94 | 88 | 82 | 99 | 92 | 86 | 82 | 88 | 84 | 80 | 85 | 81 | 78 | 82 | 79 | 76 | 74 |
| 3 | 93 | 84 | 76 | 70 | 91 | 82 | 75 | 70 | 79 | 73 | 69 | 77 | 72 | 67 | 74 | 70 | 66 | 64 |
| 4 | 86 | 75 | 67 | 61 | 84 | 74 | 66 | 61 | 71 | 65 | 60 | 69 | 64 | 59 | 67 | 62 | 58 | 56 |
| 5 | 80 | 68 | 60 | 54 | 78 | 67 | 59 | 53 | 65 | 58 | 53 | 63 | 57 | 52 | 61 | 56 | 52 | 50 |
| 6 | 74 | 62 | 54 | 48 | 72 | 61 | 53 | 47 | 59 | 52 | 47 | 58 | 51 | 47 | 56 | 51 | 46 | 44 |
| 7 | 69 | 56 | 48 | 43 | 67 | 56 | 48 | 42 | 54 | 47 | 42 | 53 | 47 | 42 | 52 | 46 | 42 | 40 |
| 8 | 65 | 52 | 44 | 38 | 63 | 51 | 44 | 38 | 50 | 43 | 38 | 49 | 42 | 38 | 48 | 42 | 38 | 36 |
| 9 | 60 | 48 | 40 | 35 | 59 | 47 | 40 | 35 | 46 | 39 | 35 | 45 | 39 | 34 | 44 | 38 | 34 | 33 |
| 10 | 57 | 44 | 37 | 32 | 56 | 44 | 37 | 32 | 43 | 36 | 32 | 42 | 36 | 32 | 41 | 35 | 31 | 30 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|------|------|------|
| 0° | 5122 | 5122 | 5122 |
| 5° | 5147 | 5108 | 5131 |
| 10° | 5145 | 5106 | 5127 |
| 15° | 5127 | 5095 | 5103 |
| 20° | 5093 | 5054 | 5060 |
| 25° | 5025 | 4979 | 4994 |
| 30° | 4910 | 4856 | 4868 |
| 35° | 4708 | 4628 | 4530 |
| 40° | 4402 | 4293 | 3940 |
| 45° | 3984 | 3870 | 3090 |
| 50° | 3525 | 3131 | 2605 |
| 55° | 3119 | 2574 | 2297 |
| 60° | 2693 | 2130 | 2036 |
| 65° | 2341 | 1694 | 1873 |
| 70° | 2116 | 1454 | 1873 |
| 75° | 2033 | 1519 | 2093 |
| 80° | 2264 | 1934 | 2444 |
| 85° | 2390 | 2062 | 2927 |



TEST NUMBER: P291175

CATALOG NUMBER: 14GR-LD5-43-A125-UNV-L83050-W2A1-U-3000K

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 180.5 | 4.3 |
| 10°-20° | 517.4 | 12.4 |
| 20°-30° | 774.3 | 18.6 |
| 30°-40° | 876.5 | 21.0 |
| 40°-50° | 746.6 | 17.9 |
| 50°-60° | 505.5 | 12.1 |
| 60°-70° | 301.8 | 7.2 |
| 70°-80° | 188.6 | 4.5 |
| 80°-90° | 79.7 | 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° | 1472.3 | 35.3 |
| 0°-40° | 2348.8 | 56.3 |
| 0°-60° | 3600.9 | 86.3 |
| 0°-90° | 4171.0 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 4171.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|------|-------|------|-------|------|------|
| 0° | 1903 | 1903 | 1903 | 1903 | 1903 | |
| 5° | 1905 | 1900 | 1891 | 1902 | 1900 | 181 |
| 15° | 1840 | 1834 | 1829 | 1840 | 1832 | 519 |
| 25° | 1692 | 1688 | 1677 | 1685 | 1682 | 778 |
| 35° | 1433 | 1424 | 1409 | 1394 | 1379 | 893 |
| 45° | 1047 | 1050 | 1017 | 867 | 812 | 807 |
| 55° | 665 | 628 | 549 | 490 | 490 | 594 |
| 65° | 368 | 307 | 266 | 284 | 294 | 371 |
| 75° | 196 | 175 | 146 | 192 | 201 | 211 |
| 85° | 77 | 72 | 67 | 84 | 95 | 83 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P291175

CATALOG NUMBER: 14GR-LD5-43-A125-UNV-L83050-W2A1-U-3000K

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|--------|--------|--------|--------|--------|
| 0° | 1903.4 | 1903.4 | 1903.4 | 1903.4 | 1903.4 |
| 2.5° | 1910.1 | 1905.3 | 1894.6 | 1907.2 | 1905.3 |
| 5° | 1905.3 | 1900.5 | 1890.8 | 1902.4 | 1899.5 |
| 7.5° | 1895.6 | 1890.8 | 1882.1 | 1893.7 | 1888.8 |
| 10° | 1883.0 | 1877.2 | 1868.5 | 1881.1 | 1876.3 |
| 12.5° | 1863.7 | 1857.9 | 1850.1 | 1862.7 | 1855.9 |
| 15° | 1840.5 | 1833.7 | 1828.8 | 1840.5 | 1831.8 |
| 17.5° | 1812.4 | 1806.6 | 1799.8 | 1811.4 | 1801.8 |
| 20° | 1778.5 | 1773.7 | 1765.0 | 1771.8 | 1766.9 |
| 22.5° | 1739.8 | 1733.1 | 1724.3 | 1732.1 | 1725.3 |
| 25° | 1692.4 | 1687.6 | 1676.9 | 1684.7 | 1681.8 |
| 27.5° | 1638.2 | 1635.3 | 1622.7 | 1632.4 | 1627.6 |
| 30° | 1580.2 | 1572.4 | 1562.7 | 1565.7 | 1566.6 |
| 32.5° | 1513.4 | 1503.7 | 1496.0 | 1489.2 | 1482.4 |
| 35° | 1433.1 | 1424.4 | 1408.9 | 1394.4 | 1378.9 |
| 37.5° | 1349.9 | 1338.3 | 1322.8 | 1290.8 | 1271.5 |
| 40° | 1253.1 | 1247.3 | 1222.1 | 1177.6 | 1121.5 |
| 42.5° | 1154.4 | 1148.6 | 1126.3 | 1026.7 | 965.7 |
| 45° | 1047.0 | 1049.9 | 1017.0 | 867.0 | 811.9 |
| 47.5° | 944.4 | 952.2 | 880.6 | 740.2 | 711.2 |
| 50° | 841.9 | 850.6 | 748.0 | 639.6 | 622.2 |
| 52.5° | 751.9 | 745.1 | 637.7 | 561.2 | 553.5 |
| 55° | 664.8 | 628.0 | 548.7 | 489.6 | 489.6 |
| 57.5° | 575.7 | 523.5 | 466.4 | 428.7 | 428.7 |
| 60° | 500.3 | 435.4 | 395.8 | 370.6 | 378.3 |
| 62.5° | 430.6 | 361.9 | 328.0 | 323.2 | 332.9 |
| 65° | 367.7 | 306.7 | 266.1 | 284.5 | 294.2 |
| 67.5° | 316.4 | 262.2 | 218.7 | 257.4 | 263.2 |
| 70° | 269.0 | 228.4 | 184.8 | 237.1 | 238.0 |
| 72.5° | 225.5 | 201.3 | 158.7 | 214.8 | 218.7 |
| 75° | 195.5 | 175.1 | 146.1 | 191.6 | 201.3 |
| 77.5° | 171.3 | 150.0 | 134.5 | 165.5 | 183.9 |
| 80° | 146.1 | 122.9 | 124.8 | 139.3 | 157.7 |
| 82.5° | 112.2 | 94.8 | 98.7 | 114.2 | 128.7 |
| 85° | 77.4 | 71.6 | 66.8 | 84.2 | 94.8 |
| 87.5° | 41.6 | 38.7 | 33.9 | 47.4 | 48.4 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)