

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: P284420

Luminaire Tested: **22FP2130C**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P284420
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1808-913-6)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22FP2130C
Description: 2x2 20W 3000K SE 80CRI

Light Source: -
Ballast/Driver: -

Summary

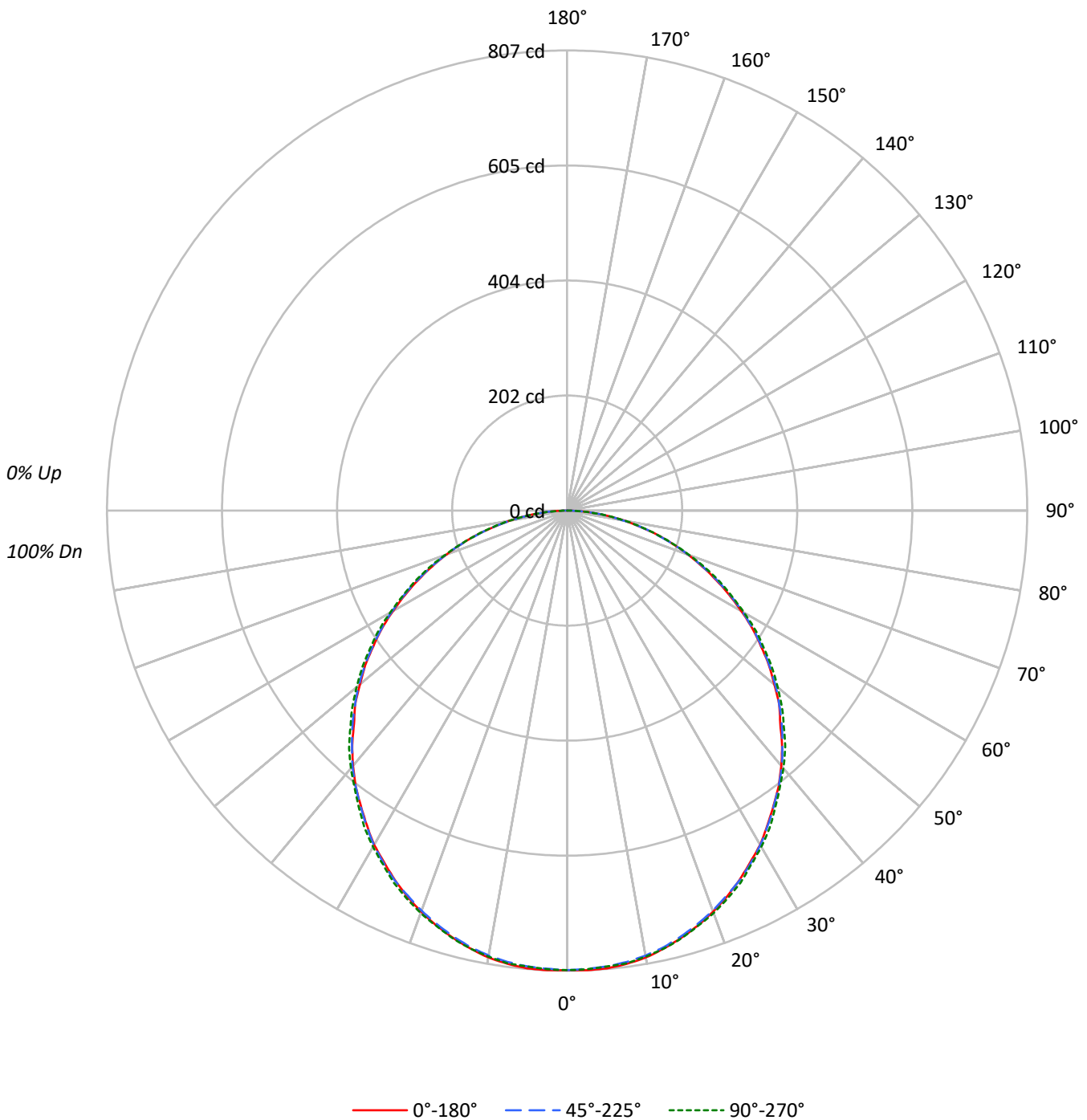
Lumens per Lamp: N/A
Luminaire Lumens: 2317.9 lumens
Efficiency: N/A
Efficacy: 112.0 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.26 / 1.37
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 20.7
Input Voltage (V): NR
Input Current (A_{in}): 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 | 104 | 99 | 95 | 106 | 101 | 97 | 94 | 97 | 94 | 91 | 93 | 90 | 88 | 89 | 87 | 85 | 83 |
| 2 | 98 | 90 | 83 | 77 | 96 | 88 | 82 | 76 | 85 | 79 | 75 | 81 | 77 | 73 | 78 | 75 | 71 | 69 |
| 3 | 90 | 79 | 71 | 64 | 87 | 77 | 70 | 63 | 74 | 68 | 62 | 72 | 66 | 61 | 69 | 64 | 60 | 58 |
| 4 | 82 | 70 | 61 | 54 | 80 | 69 | 60 | 54 | 66 | 59 | 53 | 64 | 57 | 52 | 61 | 56 | 52 | 49 |
| 5 | 75 | 62 | 53 | 47 | 73 | 61 | 53 | 46 | 59 | 52 | 46 | 57 | 50 | 45 | 55 | 49 | 45 | 43 |
| 6 | 70 | 56 | 47 | 41 | 68 | 55 | 47 | 40 | 53 | 46 | 40 | 52 | 45 | 40 | 50 | 44 | 39 | 37 |
| 7 | 65 | 51 | 42 | 36 | 63 | 50 | 42 | 36 | 48 | 41 | 35 | 47 | 40 | 35 | 46 | 40 | 35 | 33 |
| 8 | 60 | 46 | 38 | 32 | 58 | 46 | 38 | 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° | 2169 | 2169 | 2169 |
| 5° | 2177 | 2168 | 2168 |
| 10° | 2175 | 2165 | 2170 |
| 15° | 2160 | 2154 | 2163 |
| 20° | 2143 | 2139 | 2151 |
| 25° | 2122 | 2125 | 2137 |
| 30° | 2103 | 2105 | 2116 |
| 35° | 2074 | 2076 | 2090 |
| 40° | 2051 | 2057 | 2072 |
| 45° | 2011 | 2026 | 2046 |
| 50° | 1986 | 1996 | 2017 |
| 55° | 1948 | 1956 | 1979 |
| 60° | 1898 | 1912 | 1931 |
| 65° | 1838 | 1854 | 1881 |
| 70° | 1773 | 1780 | 1799 |
| 75° | 1702 | 1684 | 1702 |
| 80° | 1582 | 1556 | 1609 |
| 85° | 1380 | 1408 | 1380 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 76.4 | 3.3 |
| 10°-20° | 218.4 | 9.4 |
| 20°-30° | 329.9 | 14.2 |
| 30°-40° | 396.7 | 17.1 |
| 40°-50° | 411.5 | 17.8 |
| 50°-60° | 373.6 | 16.1 |
| 60°-70° | 288.2 | 12.4 |
| 70°-80° | 172.1 | 7.4 |
| 80°-90° | 51.2 | 2.2 |
| 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° | 624.7 | 27.0 |
| 0°-40° | 1021.4 | 44.1 |
| 0°-60° | 1806.4 | 77.9 |
| 0°-90° | 2317.9 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 2317.9 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|-----|-------|-----|-------|-----|------|
| 0° | 806 | 806 | 806 | 806 | 806 | |
| 5° | 806 | 803 | 802 | 802 | 802 | 77 |
| 15° | 776 | 775 | 773 | 774 | 776 | 219 |
| 25° | 715 | 715 | 716 | 716 | 720 | 329 |
| 35° | 631 | 634 | 632 | 634 | 636 | 395 |
| 45° | 528 | 532 | 532 | 535 | 538 | 409 |
| 55° | 415 | 417 | 417 | 419 | 422 | 371 |
| 65° | 289 | 290 | 291 | 293 | 295 | 286 |
| 75° | 164 | 162 | 162 | 163 | 164 | 172 |
| 85° | 45 | 46 | 46 | 45 | 45 | 52 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



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CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|-------|-------|-------|-------|-------|
| 0° | 805.9 | 805.9 | 805.9 | 805.9 | 805.9 |
| 2.5° | 806.8 | 806.8 | 804.2 | 805.1 | 805.1 |
| 5° | 805.9 | 803.4 | 802.5 | 802.5 | 802.5 |
| 7.5° | 801.7 | 799.2 | 798.3 | 799.2 | 800.9 |
| 10° | 795.8 | 792.4 | 792.4 | 792.4 | 794.1 |
| 12.5° | 786.5 | 784.8 | 784.0 | 783.1 | 786.5 |
| 15° | 775.5 | 774.7 | 773.0 | 773.8 | 776.4 |
| 17.5° | 762.9 | 761.2 | 760.3 | 762.9 | 763.7 |
| 20° | 748.5 | 746.8 | 746.8 | 749.4 | 751.1 |
| 22.5° | 732.5 | 732.5 | 730.8 | 733.3 | 735.9 |
| 25° | 714.8 | 714.8 | 715.6 | 716.5 | 719.8 |
| 27.5° | 695.4 | 696.2 | 697.1 | 698.7 | 699.6 |
| 30° | 676.8 | 676.0 | 677.6 | 679.3 | 681.0 |
| 32.5° | 654.0 | 655.7 | 654.9 | 659.1 | 660.8 |
| 35° | 631.2 | 633.8 | 632.1 | 633.8 | 636.3 |
| 37.5° | 609.3 | 610.1 | 609.3 | 612.7 | 612.7 |
| 40° | 584.0 | 584.0 | 585.7 | 588.2 | 589.9 |
| 42.5° | 557.8 | 558.7 | 558.7 | 562.0 | 566.2 |
| 45° | 528.3 | 531.7 | 532.5 | 535.0 | 537.6 |
| 47.5° | 504.6 | 503.8 | 504.6 | 507.2 | 511.4 |
| 50° | 474.3 | 476.0 | 476.8 | 479.3 | 481.9 |
| 52.5° | 446.4 | 447.3 | 447.3 | 449.8 | 453.2 |
| 55° | 415.2 | 416.9 | 416.9 | 419.4 | 421.9 |
| 57.5° | 385.7 | 384.8 | 386.5 | 389.0 | 392.4 |
| 60° | 352.7 | 352.7 | 355.3 | 357.0 | 358.7 |
| 62.5° | 320.7 | 321.5 | 323.2 | 325.7 | 325.7 |
| 65° | 288.6 | 290.3 | 291.1 | 292.8 | 295.4 |
| 67.5° | 256.5 | 257.4 | 258.2 | 259.9 | 262.4 |
| 70° | 225.3 | 225.3 | 226.2 | 227.9 | 228.7 |
| 72.5° | 194.1 | 193.3 | 193.3 | 196.6 | 195.8 |
| 75° | 163.7 | 162.0 | 162.0 | 162.9 | 163.7 |
| 77.5° | 130.8 | 130.0 | 131.6 | 132.5 | 132.5 |
| 80° | 102.1 | 101.3 | 100.4 | 101.3 | 103.8 |
| 82.5° | 72.6 | 72.6 | 71.7 | 72.6 | 72.6 |
| 85° | 44.7 | 45.6 | 45.6 | 44.7 | 44.7 |
| 87.5° | 21.1 | 20.3 | 20.3 | 19.4 | 18.6 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)