

Scaled data based on original data using

LM-41-14 Approved Method for Photometric Testing Of Indoor Fluorescent Luminaires

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: METALUX

Report Number: 220P124

Luminaire Tested: **2EP3GX-432S48I**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: 220P124
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 2EP3GX-432S48I
Description: 2 X 4 Recessed Convertible Body Luminaire with a 32 cell semi-specular low iridescent parabolic louver.
Light Source: Four - FO32/735 - 2800 Lumens ea. - 32 Watts ea.
Ballast/Driver: Magnetek B432I120RH Electronic - L.O.B.F. = 89.5

Summary

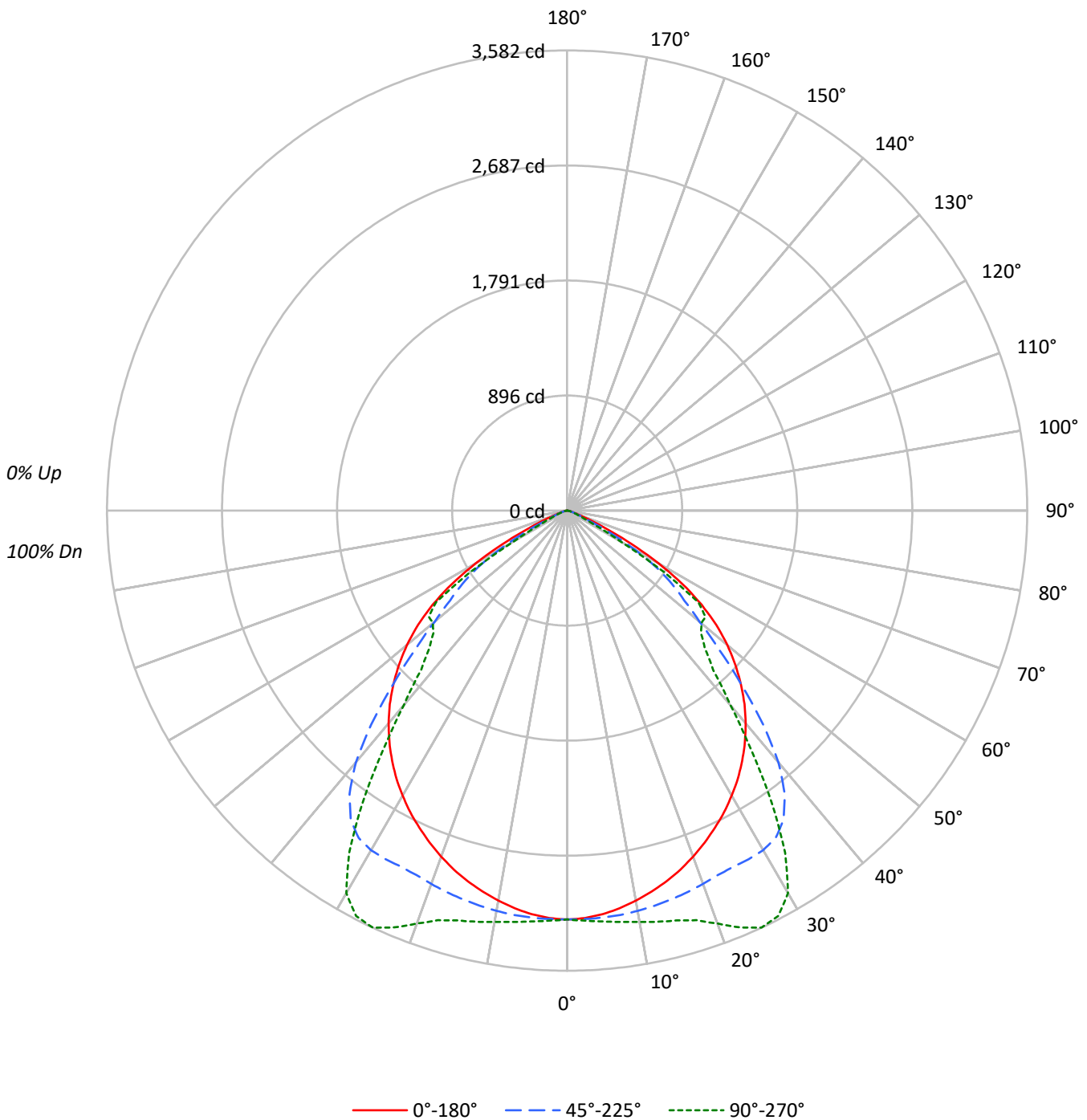
Lumens per Lamp: 2800 (4 lamps)
Luminaire Lumens: 7043.3 lumens
Efficiency: 62.9%
Efficacy: 61.8 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.38 / 1.34
Luminous Opening: Rectangular (W 1.73' x L: 3.75' x H: 0')
CIE Type: Direct

Input Watts (W): 114
Input Voltage (V): NR
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 | 75 | 75 | 75 | 75 | 73 | 73 | 73 | 73 | 70 | 70 | 70 | 67 | 67 | 67 | 64 | 64 | 64 | 63 |
| 1 | 70 | 68 | 66 | 64 | 69 | 66 | 65 | 63 | 64 | 62 | 61 | 61 | 60 | 59 | 59 | 58 | 57 | 56 |
| 2 | 65 | 61 | 58 | 55 | 64 | 60 | 57 | 54 | 58 | 55 | 53 | 56 | 54 | 52 | 54 | 52 | 51 | 49 |
| 3 | 60 | 55 | 51 | 47 | 59 | 54 | 50 | 47 | 52 | 49 | 46 | 50 | 48 | 45 | 49 | 47 | 45 | 43 |
| 4 | 56 | 49 | 45 | 41 | 54 | 49 | 44 | 41 | 47 | 43 | 40 | 46 | 43 | 40 | 44 | 42 | 39 | 38 |
| 5 | 52 | 45 | 40 | 36 | 51 | 44 | 39 | 36 | 43 | 39 | 36 | 42 | 38 | 35 | 41 | 37 | 35 | 34 |
| 6 | 48 | 41 | 36 | 32 | 47 | 40 | 35 | 32 | 39 | 35 | 32 | 38 | 34 | 31 | 37 | 34 | 31 | 30 |
| 7 | 45 | 37 | 32 | 29 | 44 | 37 | 32 | 29 | 36 | 31 | 28 | 35 | 31 | 28 | 34 | 31 | 28 | 27 |
| 8 | 42 | 34 | 29 | 26 | 41 | 34 | 29 | 26 | 33 | 29 | 26 | 32 | 28 | 25 | 31 | 28 | 25 | 24 |
| 9 | 39 | 31 | 27 | 23 | 38 | 31 | 26 | 23 | 30 | 26 | 23 | 30 | 26 | 23 | 29 | 26 | 23 | 22 |
| 10 | 37 | 29 | 24 | 21 | 36 | 29 | 24 | 21 | 28 | 24 | 21 | 28 | 24 | 21 | 27 | 24 | 21 | 20 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|------|------|------|
| 0° | 5284 | 5284 | 5284 |
| 5° | 5255 | 5299 | 5350 |
| 10° | 5197 | 5333 | 5481 |
| 15° | 5133 | 5384 | 5676 |
| 20° | 5064 | 5464 | 6043 |
| 25° | 4987 | 5603 | 6561 |
| 30° | 4911 | 5850 | 6590 |
| 35° | 4815 | 5950 | 5629 |
| 40° | 4685 | 5547 | 4284 |
| 45° | 4493 | 4514 | 3559 |
| 50° | 4202 | 3479 | 3522 |
| 55° | 3696 | 2880 | 3606 |
| 60° | 2726 | 2038 | 1594 |
| 65° | 1359 | 758 | 554 |
| 70° | 490 | 345 | 311 |
| 75° | 276 | 224 | 205 |
| 80° | 182 | 153 | 134 |
| 85° | 114 | 95 | 76 |



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CATALOG NUMBER: 2EP3GX-432S48I

ZONAL LUMENS:

CANDELA DISTRIBUTION:

| Zone | Lumens | % Fixture | % Lamp | | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----------|--------|-----------|--------|------|------|-------|------|-------|------|------|
| 0°-10° | 302.9 | 4.3 | 2.7 | 0° | 3183 | 3183 | 3183 | 3183 | 3183 | |
| 10°-20° | 888.5 | 12.6 | 7.9 | 5° | 3154 | 3155 | 3180 | 3197 | 3211 | 299 |
| 20°-30° | 1430.6 | 20.3 | 12.8 | 15° | 2987 | 3025 | 3133 | 3244 | 3303 | 842 |
| 30°-40° | 1686.0 | 23.9 | 15.1 | 25° | 2723 | 2814 | 3059 | 3409 | 3582 | 1255 |
| 40°-50° | 1419.7 | 20.2 | 12.7 | 35° | 2376 | 2538 | 2936 | 2869 | 2778 | 1485 |
| 50°-60° | 999.1 | 14.2 | 8.9 | 45° | 1914 | 2146 | 1923 | 1508 | 1516 | 1471 |
| 60°-70° | 266.9 | 3.8 | 2.4 | 55° | 1277 | 1320 | 995 | 1088 | 1246 | 1121 |
| 70°-80° | 42.6 | 0.6 | 0.4 | 65° | 346 | 283 | 193 | 158 | 141 | 381 |
| 80°-90° | 7.0 | 0.1 | 0.1 | 75° | 43 | 40 | 35 | 34 | 32 | 52 |
| 90°-100° | 0.0 | 0.0 | 0.0 | 85° | 6 | 6 | 5 | 5 | 4 | 7 |
| 100°-110° | 0.0 | 0.0 | 0.0 | 90° | 0 | 0 | 0 | 0 | 0 | 0 |
| 110°-120° | 0.0 | 0.0 | 0.0 | 95° | 0 | 0 | 0 | 0 | 0 | 0 |
| 120°-130° | 0.0 | 0.0 | 0.0 | 105° | 0 | 0 | 0 | 0 | 0 | 0 |
| 130°-140° | 0.0 | 0.0 | 0.0 | 115° | 0 | 0 | 0 | 0 | 0 | 0 |
| 140°-150° | 0.0 | 0.0 | 0.0 | 125° | 0 | 0 | 0 | 0 | 0 | 0 |
| 150°-160° | 0.0 | 0.0 | 0.0 | 135° | 0 | 0 | 0 | 0 | 0 | 0 |
| 160°-170° | 0.0 | 0.0 | 0.0 | 145° | 0 | 0 | 0 | 0 | 0 | 0 |
| 170°-180° | 0.0 | 0.0 | 0.0 | 155° | 0 | 0 | 0 | 0 | 0 | 0 |
| 0°-30° | 2622.1 | 37.2 | 23.4 | 165° | 0 | 0 | 0 | 0 | 0 | 0 |
| 0°-40° | 4308.0 | 61.2 | 38.5 | 175° | 0 | 0 | 0 | 0 | 0 | 0 |
| 0°-60° | 6726.8 | 95.5 | 60.1 | 180° | 0 | 0 | 0 | 0 | 0 | 0 |
| 0°-90° | 7043.3 | 100.0 | 62.9 | | | | | | | |
| 90°-120° | 0.0 | 0.0 | 0.0 | | | | | | | |
| 90°-150° | 0.0 | 0.0 | 0.0 | | | | | | | |
| 90°-180° | 0.0 | 0.0 | 0.0 | | | | | | | |
| 0°-180° | 7043.3 | 100.0 | 62.9 | | | | | | | |



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CATALOG NUMBER: 2EP3GX-432S48I

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|------|-------|------|-------|------|
| 0° | 3183 | 3183 | 3183 | 3183 | 3183 |
| 2.5° | 3175 | 3170 | 3182 | 3187 | 3195 |
| 5° | 3154 | 3155 | 3180 | 3197 | 3211 |
| 7.5° | 3123 | 3131 | 3175 | 3209 | 3229 |
| 10° | 3083 | 3101 | 3164 | 3221 | 3252 |
| 12.5° | 3038 | 3065 | 3150 | 3234 | 3278 |
| 15° | 2987 | 3025 | 3133 | 3244 | 3303 |
| 17.5° | 2931 | 2980 | 3115 | 3255 | 3343 |
| 20° | 2867 | 2929 | 3093 | 3292 | 3421 |
| 22.5° | 2797 | 2874 | 3070 | 3350 | 3512 |
| 25° | 2723 | 2814 | 3059 | 3409 | 3582 |
| 27.5° | 2646 | 2752 | 3059 | 3422 | 3558 |
| 30° | 2562 | 2685 | 3052 | 3345 | 3438 |
| 32.5° | 2474 | 2615 | 3022 | 3174 | 3159 |
| 35° | 2376 | 2538 | 2936 | 2869 | 2778 |
| 37.5° | 2273 | 2454 | 2783 | 2489 | 2360 |
| 40° | 2162 | 2365 | 2560 | 2101 | 1977 |
| 42.5° | 2043 | 2265 | 2256 | 1756 | 1684 |
| 45° | 1914 | 2146 | 1923 | 1508 | 1516 |
| 47.5° | 1775 | 2000 | 1610 | 1360 | 1413 |
| 50° | 1627 | 1817 | 1347 | 1258 | 1364 |
| 52.5° | 1463 | 1590 | 1149 | 1182 | 1357 |
| 55° | 1277 | 1320 | 995 | 1088 | 1246 |
| 57.5° | 1064 | 1022 | 827 | 883 | 899 |
| 60° | 821 | 723 | 614 | 566 | 480 |
| 62.5° | 564 | 468 | 382 | 289 | 239 |
| 65° | 346 | 283 | 193 | 158 | 141 |
| 67.5° | 185 | 161 | 107 | 100 | 92 |
| 70° | 101 | 92 | 71 | 68 | 64 |
| 72.5° | 64 | 59 | 50 | 48 | 45 |
| 75° | 43 | 40 | 35 | 34 | 32 |
| 77.5° | 29 | 28 | 24 | 23 | 22 |
| 80° | 19 | 18 | 16 | 16 | 14 |
| 82.5° | 11 | 11 | 10 | 9 | 9 |
| 85° | 6 | 6 | 5 | 5 | 4 |
| 87.5° | 2 | 2 | 2 | 2 | 2 |
| 90° | 0 | 0 | 0 | 0 | 0 |
| 92.5° | 0 | 0 | 0 | 0 | 0 |
| 95° | 0 | 0 | 0 | 0 | 0 |
| 97.5° | 0 | 0 | 0 | 0 | 0 |
| 100° | 0 | 0 | 0 | 0 | 0 |
| 102.5° | 0 | 0 | 0 | 0 | 0 |
| 105° | 0 | 0 | 0 | 0 | 0 |
| 107.5° | 0 | 0 | 0 | 0 | 0 |
| 110° | 0 | 0 | 0 | 0 | 0 |



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CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|----|-------|-----|-------|-----|
| 112.5° | 0 | 0 | 0 | 0 | 0 |
| 115° | 0 | 0 | 0 | 0 | 0 |
| 117.5° | 0 | 0 | 0 | 0 | 0 |
| 120° | 0 | 0 | 0 | 0 | 0 |
| 122.5° | 0 | 0 | 0 | 0 | 0 |
| 125° | 0 | 0 | 0 | 0 | 0 |
| 127.5° | 0 | 0 | 0 | 0 | 0 |
| 130° | 0 | 0 | 0 | 0 | 0 |
| 132.5° | 0 | 0 | 0 | 0 | 0 |
| 135° | 0 | 0 | 0 | 0 | 0 |
| 137.5° | 0 | 0 | 0 | 0 | 0 |
| 140° | 0 | 0 | 0 | 0 | 0 |
| 142.5° | 0 | 0 | 0 | 0 | 0 |
| 145° | 0 | 0 | 0 | 0 | 0 |
| 147.5° | 0 | 0 | 0 | 0 | 0 |
| 150° | 0 | 0 | 0 | 0 | 0 |
| 152.5° | 0 | 0 | 0 | 0 | 0 |
| 155° | 0 | 0 | 0 | 0 | 0 |
| 157.5° | 0 | 0 | 0 | 0 | 0 |
| 160° | 0 | 0 | 0 | 0 | 0 |
| 162.5° | 0 | 0 | 0 | 0 | 0 |
| 165° | 0 | 0 | 0 | 0 | 0 |
| 167.5° | 0 | 0 | 0 | 0 | 0 |
| 170° | 0 | 0 | 0 | 0 | 0 |
| 172.5° | 0 | 0 | 0 | 0 | 0 |
| 175° | 0 | 0 | 0 | 0 | 0 |
| 177.5° | 0 | 0 | 0 | 0 | 0 |
| 180° | 0 | 0 | 0 | 0 | 0 |

(END OF REPORT)