

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: 104P239

Luminaire Tested: **2P2GX-432S46I**

Issue Date: 3/3/2020



Test Information

Test Method: LM-41-14
Report Number: 104P239
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 2P2GX-432S46I
Description: 2 X 4 Recessed Convertible Body Luminaire with a 2"
deep 24 cell semi-specular low iridescent parabolic louver.
Light Source: Four - F32T8/TL735 - 2800 Lumens ea. - 32 Watts ea.
Ballast/Driver: Magnetek B432I120RH Electronic L.O.B.F. = 89.7%

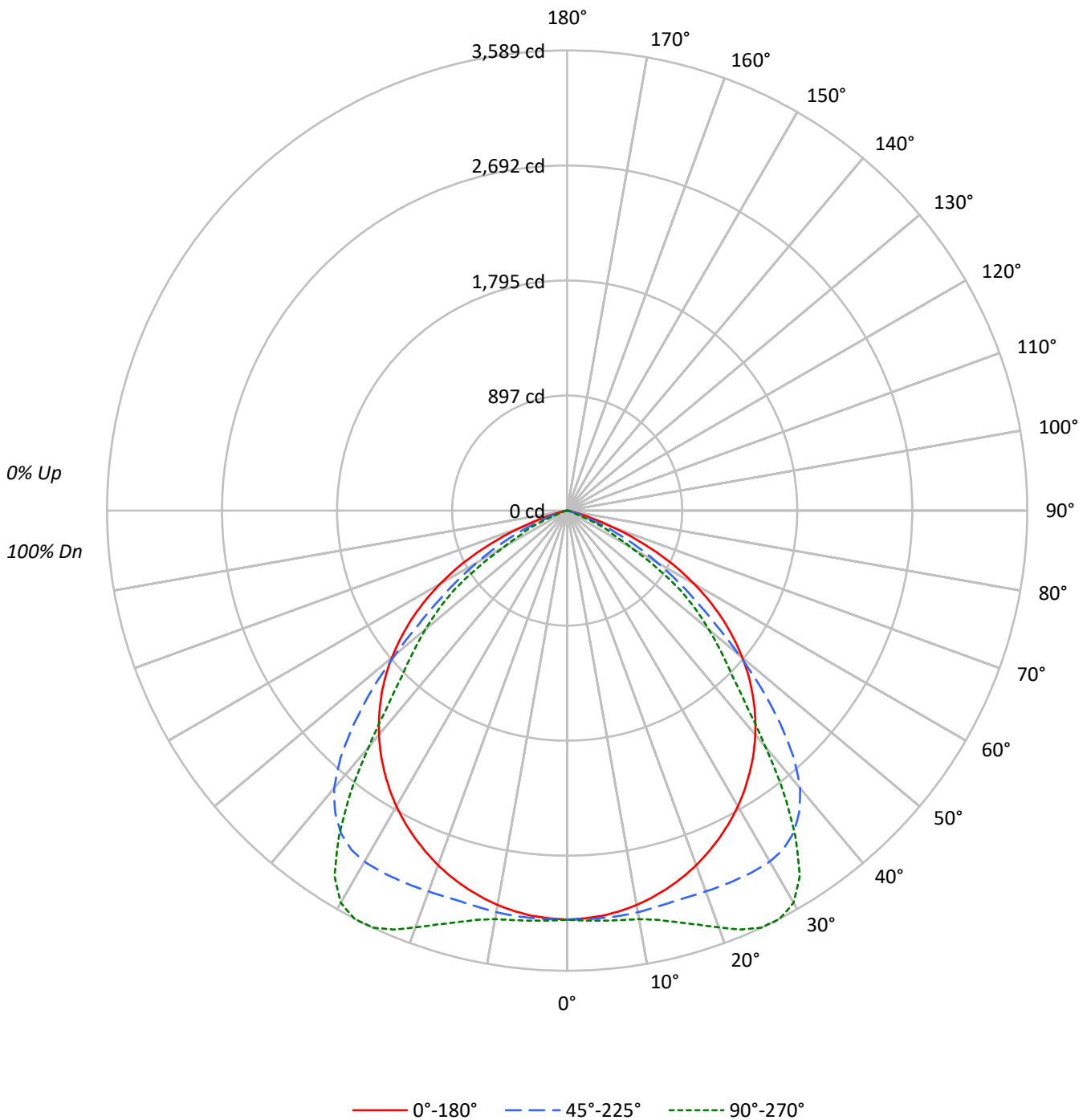
Summary

Lumens per Lamp: 2800 (4 lamps)
Luminaire Lumens: 7872.7 lumens
Efficiency: 70.3%
Efficacy: 72.2 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.44 / 1.42
Luminous Opening: Rectangular (W 1.74' x L: 3.76' x H: 0')
CIE Type: Direct

Input Watts (W): 109
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 | 50 | 30 | 10 | 50 | 30 | 10 | 0 | | |
| RCR | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0 | 84 | 84 | 84 | 84 | 82 | 82 | 82 | 82 | 78 | 78 | 78 | 75 | 75 | 75 | 72 | 72 | 72 | 70 | | | | | 70 | | | |
| 1 | 78 | 75 | 73 | 71 | 76 | 74 | 72 | 70 | 71 | 69 | 68 | 68 | 67 | 66 | 66 | 65 | 64 | 62 | | | | | 62 | | | |
| 2 | 72 | 67 | 63 | 60 | 70 | 66 | 62 | 59 | 64 | 61 | 58 | 61 | 59 | 57 | 59 | 57 | 56 | 54 | | | | | 54 | | | |
| 3 | 67 | 60 | 55 | 51 | 65 | 59 | 55 | 51 | 57 | 53 | 50 | 55 | 52 | 49 | 54 | 51 | 48 | 47 | | | | | 47 | | | |
| 4 | 61 | 54 | 49 | 44 | 60 | 53 | 48 | 44 | 51 | 47 | 44 | 50 | 46 | 43 | 48 | 45 | 42 | 41 | | | | | 41 | | | |
| 5 | 57 | 49 | 43 | 39 | 55 | 48 | 43 | 39 | 46 | 42 | 38 | 45 | 41 | 38 | 44 | 40 | 37 | 36 | | | | | 36 | | | |
| 6 | 53 | 44 | 38 | 34 | 51 | 43 | 38 | 34 | 42 | 37 | 34 | 41 | 37 | 34 | 40 | 36 | 33 | 32 | | | | | 32 | | | |
| 7 | 49 | 40 | 34 | 30 | 48 | 40 | 34 | 30 | 39 | 34 | 30 | 38 | 33 | 30 | 37 | 33 | 30 | 28 | | | | | 28 | | | |
| 8 | 46 | 37 | 31 | 27 | 45 | 36 | 31 | 27 | 35 | 30 | 27 | 34 | 30 | 27 | 34 | 30 | 27 | 25 | | | | | 25 | | | |
| 9 | 43 | 34 | 28 | 25 | 42 | 33 | 28 | 25 | 33 | 28 | 24 | 32 | 27 | 24 | 31 | 27 | 24 | 23 | | | | | 23 | | | |
| 10 | 40 | 31 | 26 | 22 | 39 | 31 | 26 | 22 | 30 | 25 | 22 | 29 | 25 | 22 | 29 | 25 | 22 | 21 | | | | | 21 | | | |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|------|------|------|
| 0° | 5249 | 5249 | 5249 |
| 5° | 5239 | 5267 | 5304 |
| 10° | 5218 | 5315 | 5405 |
| 15° | 5189 | 5383 | 5661 |
| 20° | 5153 | 5535 | 6055 |
| 25° | 5109 | 5750 | 6514 |
| 30° | 5060 | 6006 | 6711 |
| 35° | 4994 | 6175 | 6233 |
| 40° | 4906 | 6075 | 5175 |
| 45° | 4773 | 5469 | 4231 |
| 50° | 4567 | 4480 | 3696 |
| 55° | 4254 | 3497 | 3061 |
| 60° | 3771 | 2685 | 1886 |
| 65° | 3006 | 1779 | 1242 |
| 70° | 1852 | 847 | 260 |
| 75° | 617 | 242 | 178 |
| 80° | 313 | 161 | 123 |
| 85° | 189 | 113 | 94 |



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ZONAL LUMENS:

CANDELA DISTRIBUTION:

| Zone | Lumens | % Fixture | % Lamp | | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----------|--------|-----------|--------|------|------|-------|------|-------|------|------|
| 0°-10° | 304.0 | 3.9 | 2.7 | 0° | 3190 | 3190 | 3190 | 3190 | 3190 | |
| 10°-20° | 899.9 | 11.4 | 8.0 | 5° | 3172 | 3173 | 3189 | 3200 | 3211 | 301 |
| 20°-30° | 1466.2 | 18.6 | 13.1 | 15° | 3046 | 3077 | 3160 | 3267 | 3323 | 859 |
| 30°-40° | 1809.2 | 23.0 | 16.2 | 25° | 2814 | 2891 | 3167 | 3466 | 3588 | 1297 |
| 40°-50° | 1637.6 | 20.8 | 14.6 | 35° | 2486 | 2655 | 3074 | 3167 | 3103 | 1554 |
| 50°-60° | 1160.9 | 14.7 | 10.4 | 45° | 2051 | 2296 | 2350 | 1891 | 1818 | 1578 |
| 60°-70° | 507.9 | 6.5 | 4.5 | 55° | 1483 | 1655 | 1219 | 1077 | 1067 | 1319 |
| 70°-80° | 78.5 | 1.0 | 0.7 | 65° | 772 | 712 | 457 | 316 | 319 | 758 |
| 80°-90° | 8.6 | 0.1 | 0.1 | 75° | 97 | 79 | 38 | 31 | 28 | 152 |
| 90°-100° | 0.0 | 0.0 | 0.0 | 85° | 10 | 8 | 6 | 5 | 5 | 13 |
| 100°-110° | 0.0 | 0.0 | 0.0 | 90° | 0 | 0 | 0 | 0 | 0 | 1 |
| 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° | 2670.1 | 33.9 | 23.8 | 165° | 0 | 0 | 0 | 0 | 0 | 0 |
| 0°-40° | 4479.3 | 56.9 | 40.0 | 175° | 0 | 0 | 0 | 0 | 0 | 0 |
| 0°-60° | 7277.7 | 92.4 | 65.0 | 180° | 0 | 0 | 0 | 0 | 0 | 0 |
| 0°-90° | 7872.7 | 100.0 | 70.3 | | | | | | | |
| 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° | 7872.7 | 100.0 | 70.3 | | | | | | | |



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CATALOG NUMBER: 2P2GX-432S46I

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|------|-------|------|-------|------|
| 0° | 3190 | 3190 | 3190 | 3190 | 3190 |
| 2.5° | 3183 | 3182 | 3190 | 3193 | 3201 |
| 5° | 3172 | 3173 | 3189 | 3200 | 3211 |
| 7.5° | 3151 | 3158 | 3187 | 3207 | 3221 |
| 10° | 3123 | 3137 | 3181 | 3214 | 3235 |
| 12.5° | 3088 | 3110 | 3169 | 3231 | 3269 |
| 15° | 3046 | 3077 | 3160 | 3267 | 3323 |
| 17.5° | 2998 | 3039 | 3157 | 3312 | 3386 |
| 20° | 2943 | 2994 | 3161 | 3360 | 3458 |
| 22.5° | 2881 | 2944 | 3166 | 3415 | 3537 |
| 25° | 2814 | 2891 | 3167 | 3466 | 3588 |
| 27.5° | 2742 | 2837 | 3168 | 3479 | 3589 |
| 30° | 2663 | 2781 | 3161 | 3444 | 3532 |
| 32.5° | 2578 | 2721 | 3135 | 3352 | 3377 |
| 35° | 2486 | 2655 | 3074 | 3167 | 3103 |
| 37.5° | 2388 | 2583 | 2972 | 2883 | 2775 |
| 40° | 2284 | 2499 | 2828 | 2564 | 2409 |
| 42.5° | 2171 | 2405 | 2617 | 2215 | 2074 |
| 45° | 2051 | 2296 | 2350 | 1891 | 1818 |
| 47.5° | 1924 | 2172 | 2060 | 1642 | 1627 |
| 50° | 1784 | 2025 | 1750 | 1448 | 1444 |
| 52.5° | 1638 | 1853 | 1462 | 1259 | 1262 |
| 55° | 1483 | 1655 | 1219 | 1077 | 1067 |
| 57.5° | 1318 | 1436 | 1014 | 878 | 823 |
| 60° | 1146 | 1197 | 816 | 652 | 573 |
| 62.5° | 963 | 950 | 636 | 444 | 403 |
| 65° | 772 | 712 | 457 | 316 | 319 |
| 67.5° | 574 | 490 | 293 | 222 | 152 |
| 70° | 385 | 300 | 176 | 71 | 54 |
| 72.5° | 222 | 162 | 106 | 43 | 38 |
| 75° | 97 | 79 | 38 | 31 | 28 |
| 77.5° | 53 | 39 | 25 | 22 | 20 |
| 80° | 33 | 24 | 17 | 15 | 13 |
| 82.5° | 20 | 14 | 11 | 9 | 8 |
| 85° | 10 | 8 | 6 | 5 | 5 |
| 87.5° | 4 | 3 | 3 | 3 | 3 |
| 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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CATALOG NUMBER: 2P2GX-432S46I

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)