

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: 220P151

Luminaire Tested: **2EP3GX-332S38I-2BC**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: 220P151
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 2EP3GX-332S38I-2BC
Description: 2 X 4 Recessed Convertible Body Luminaire with a 24
cell semi-specular low iridescent parabolic louver and two
ballast covers.
Light Source: Three FO32/35K - 2800 Lumens ea. - 32 Watts ea.
Ballast/Driver: Motorola M3-IN-T8-GP-D-120 Electronic - L.O.B.F.=85.8%

Summary

Lumens per Lamp: 2800 (3 lamps)
Luminaire Lumens: 5740.1 lumens
Efficiency: 68.3%
Efficacy: 68.3 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.6 / 1.47
Luminous Opening: Rectangular (W 1.73' x L: 3.75' x H: 0')
CIE Type: Direct

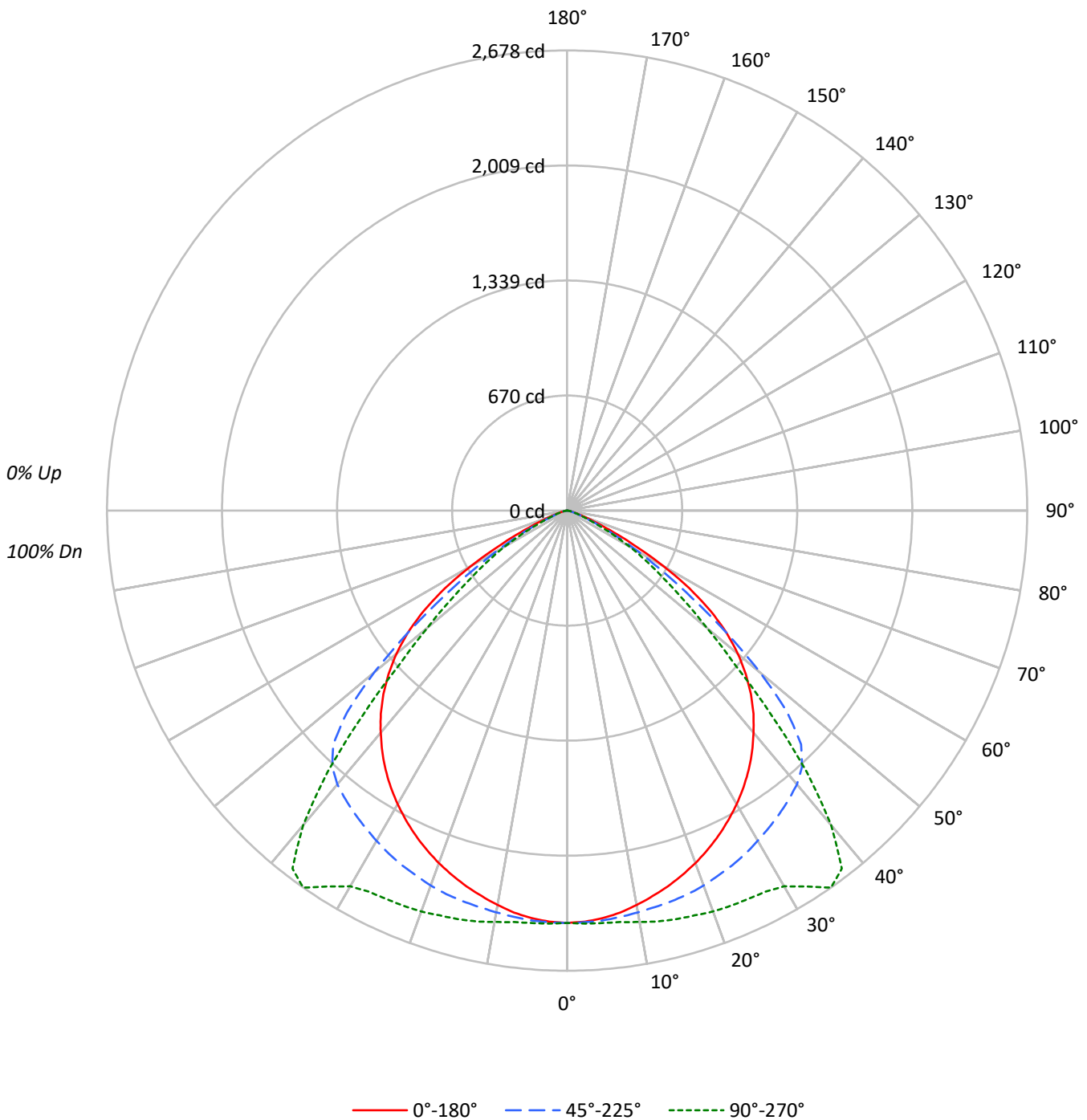
Input Watts (W): 84
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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 | 0 | |
| RCR | | | | | | | | | | | | | | | | | | | | | | |
| 0 | 81 | 81 | 81 | 81 | 79 | 79 | 79 | 79 | 76 | 76 | 76 | 73 | 73 | 73 | 70 | 70 | 70 | 70 | 70 | 70 | 68 | |
| 1 | 76 | 74 | 71 | 69 | 74 | 72 | 70 | 68 | 69 | 68 | 66 | 67 | 65 | 64 | 64 | 63 | 62 | 64 | 63 | 62 | 61 | |
| 2 | 70 | 66 | 62 | 59 | 69 | 65 | 61 | 58 | 62 | 59 | 57 | 60 | 58 | 56 | 58 | 56 | 55 | 58 | 56 | 55 | 53 | |
| 3 | 65 | 59 | 54 | 51 | 64 | 58 | 54 | 50 | 56 | 52 | 49 | 54 | 51 | 49 | 53 | 50 | 48 | 53 | 50 | 48 | 46 | |
| 4 | 60 | 53 | 48 | 44 | 59 | 52 | 47 | 44 | 51 | 46 | 43 | 49 | 45 | 43 | 48 | 45 | 42 | 48 | 45 | 42 | 41 | |
| 5 | 56 | 48 | 42 | 38 | 54 | 47 | 42 | 38 | 46 | 41 | 38 | 45 | 41 | 37 | 43 | 40 | 37 | 43 | 40 | 37 | 36 | |
| 6 | 52 | 43 | 38 | 34 | 50 | 43 | 38 | 34 | 42 | 37 | 34 | 41 | 36 | 33 | 39 | 36 | 33 | 39 | 36 | 33 | 32 | |
| 7 | 48 | 40 | 34 | 30 | 47 | 39 | 34 | 30 | 38 | 33 | 30 | 37 | 33 | 30 | 36 | 32 | 30 | 36 | 32 | 30 | 28 | |
| 8 | 45 | 36 | 31 | 27 | 44 | 36 | 31 | 27 | 35 | 30 | 27 | 34 | 30 | 27 | 33 | 29 | 27 | 33 | 29 | 27 | 25 | |
| 9 | 42 | 33 | 28 | 24 | 41 | 33 | 28 | 24 | 32 | 27 | 24 | 31 | 27 | 24 | 31 | 27 | 24 | 31 | 27 | 24 | 23 | |
| 10 | 39 | 31 | 26 | 22 | 38 | 30 | 25 | 22 | 30 | 25 | 22 | 29 | 25 | 22 | 28 | 25 | 22 | 28 | 25 | 22 | 21 | |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|------|------|------|
| 0° | 3982 | 3982 | 3982 |
| 5° | 3966 | 3987 | 4012 |
| 10° | 3927 | 4000 | 4096 |
| 15° | 3889 | 4042 | 4227 |
| 20° | 3854 | 4100 | 4384 |
| 25° | 3819 | 4167 | 4564 |
| 30° | 3780 | 4251 | 4838 |
| 35° | 3731 | 4363 | 5424 |
| 40° | 3656 | 4505 | 5177 |
| 45° | 3548 | 4517 | 3937 |
| 50° | 3348 | 3779 | 2739 |
| 55° | 2948 | 2572 | 1973 |
| 60° | 2147 | 1583 | 1387 |
| 65° | 1162 | 805 | 746 |
| 70° | 519 | 349 | 388 |
| 75° | 282 | 205 | 244 |
| 80° | 162 | 124 | 153 |
| 85° | 95 | 76 | 76 |



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ZONAL LUMENS:

CANDELA DISTRIBUTION:

| Zone | Lumens | % Fixture | % Lamp | | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----------|--------|-----------|--------|------|------|-------|------|-------|------|------|
| 0°-10° | 228.0 | 4.0 | 2.7 | 0° | 2400 | 2400 | 2400 | 2400 | 2400 | |
| 10°-20° | 666.7 | 11.6 | 7.9 | 5° | 2381 | 2384 | 2394 | 2403 | 2409 | 226 |
| 20°-30° | 1054.0 | 18.4 | 12.5 | 15° | 2264 | 2284 | 2353 | 2428 | 2461 | 639 |
| 30°-40° | 1370.6 | 23.9 | 16.3 | 25° | 2086 | 2143 | 2276 | 2415 | 2493 | 961 |
| 40°-50° | 1321.1 | 23.0 | 15.7 | 35° | 1842 | 1943 | 2154 | 2455 | 2678 | 1151 |
| 50°-60° | 800.0 | 13.9 | 9.5 | 45° | 1512 | 1654 | 1925 | 1773 | 1678 | 1161 |
| 60°-70° | 250.7 | 4.4 | 3.0 | 55° | 1019 | 1124 | 889 | 701 | 682 | 892 |
| 70°-80° | 43.1 | 0.8 | 0.5 | 65° | 296 | 260 | 205 | 194 | 190 | 320 |
| 80°-90° | 6.0 | 0.1 | 0.1 | 75° | 44 | 38 | 32 | 34 | 38 | 53 |
| 90°-100° | 0.0 | 0.0 | 0.0 | 85° | 5 | 4 | 4 | 4 | 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° | 1948.7 | 33.9 | 23.2 | 165° | 0 | 0 | 0 | 0 | 0 | 0 |
| 0°-40° | 3319.2 | 57.8 | 39.5 | 175° | 0 | 0 | 0 | 0 | 0 | 0 |
| 0°-60° | 5440.3 | 94.8 | 64.8 | 180° | 0 | 0 | 0 | 0 | 0 | 0 |
| 0°-90° | 5740.1 | 100.0 | 68.3 | | | | | | | |
| 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° | 5740.1 | 100.0 | 68.3 | | | | | | | |



TEST NUMBER: 220P151

CATALOG NUMBER: 2EP3GX-332S38I-2BC

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|------|-------|------|-------|------|
| 0° | 2400 | 2400 | 2400 | 2400 | 2400 |
| 2.5° | 2394 | 2394 | 2398 | 2403 | 2406 |
| 5° | 2381 | 2384 | 2394 | 2403 | 2409 |
| 7.5° | 2360 | 2366 | 2385 | 2406 | 2415 |
| 10° | 2331 | 2341 | 2374 | 2414 | 2431 |
| 12.5° | 2298 | 2314 | 2363 | 2424 | 2449 |
| 15° | 2264 | 2284 | 2353 | 2428 | 2461 |
| 17.5° | 2225 | 2253 | 2340 | 2427 | 2470 |
| 20° | 2183 | 2219 | 2322 | 2427 | 2483 |
| 22.5° | 2137 | 2183 | 2299 | 2424 | 2489 |
| 25° | 2086 | 2143 | 2276 | 2415 | 2493 |
| 27.5° | 2031 | 2101 | 2250 | 2407 | 2500 |
| 30° | 1973 | 2053 | 2219 | 2402 | 2525 |
| 32.5° | 1910 | 2002 | 2187 | 2416 | 2594 |
| 35° | 1842 | 1943 | 2154 | 2455 | 2678 |
| 37.5° | 1768 | 1879 | 2119 | 2477 | 2626 |
| 40° | 1688 | 1811 | 2080 | 2362 | 2390 |
| 42.5° | 1605 | 1737 | 2023 | 2105 | 2063 |
| 45° | 1512 | 1654 | 1925 | 1773 | 1678 |
| 47.5° | 1410 | 1557 | 1737 | 1417 | 1318 |
| 50° | 1297 | 1442 | 1464 | 1112 | 1061 |
| 52.5° | 1169 | 1302 | 1170 | 890 | 852 |
| 55° | 1019 | 1124 | 889 | 701 | 682 |
| 57.5° | 844 | 908 | 658 | 546 | 543 |
| 60° | 647 | 664 | 477 | 416 | 418 |
| 62.5° | 452 | 428 | 324 | 299 | 296 |
| 65° | 296 | 260 | 205 | 194 | 190 |
| 67.5° | 177 | 158 | 120 | 120 | 119 |
| 70° | 107 | 95 | 72 | 76 | 80 |
| 72.5° | 68 | 59 | 47 | 51 | 55 |
| 75° | 44 | 38 | 32 | 34 | 38 |
| 77.5° | 28 | 25 | 21 | 23 | 25 |
| 80° | 17 | 15 | 13 | 14 | 16 |
| 82.5° | 10 | 9 | 8 | 8 | 9 |
| 85° | 5 | 4 | 4 | 4 | 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)