

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: 109P152

Luminaire Tested: **2P2GX-2U6T8W11FGW.125-5.5-PAF**

Issue Date: 3/3/2020



Test Information

Test Method: LM-41-14
Report Number: 109P152
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 2P2GX-2U6T8W11FGW.125-5.5-PAF
Description: 2 X 2 Recessed Troffer with a 5.5" deep body,
2" deep white (powder painted) splay trim and
a .125 textured white translucent acrylic lens.
Light Source: Two-FB31T8/TL735/6 - 2800 Lumens ea. - 31 Watts ea.
Ballast/Driver: Triad-Utrad B232I120RH Electronic

Summary

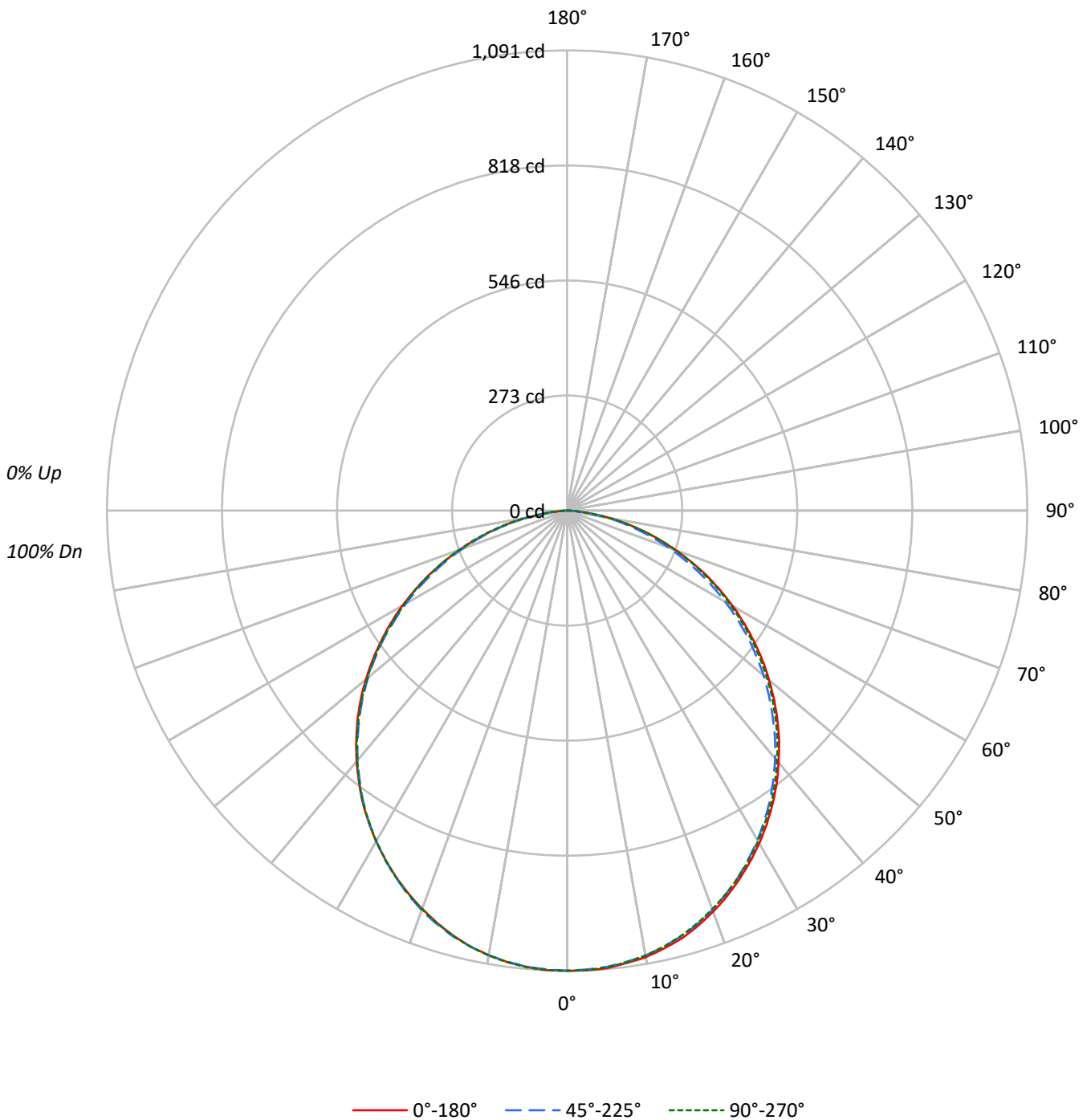
Lumens per Lamp: 2800 (2 lamps)
Luminaire Lumens: 2959.1 lumens
Efficiency: 52.8%
Efficacy: 51.1 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.23 / 1.34
Luminous Opening: Rectangular (W 1.69' x L: 1.7' x H: 0')
CIE Type: Direct

Input Watts (W): 57.9
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 | 50 | 30 | 10 | 50 | 30 | 10 | 0 | | |
| RCR | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0 | 63 | 63 | 63 | 63 | 61 | 61 | 61 | 61 | 59 | 59 | 59 | 56 | 56 | 56 | 54 | 54 | 54 | 53 | | | | | | | | |
| 1 | 58 | 55 | 53 | 51 | 56 | 54 | 52 | 50 | 52 | 50 | 49 | 50 | 48 | 47 | 48 | 47 | 46 | 45 | | | | | | | | |
| 2 | 52 | 48 | 45 | 42 | 51 | 47 | 44 | 41 | 45 | 43 | 40 | 44 | 41 | 39 | 42 | 40 | 38 | 37 | | | | | | | | |
| 3 | 48 | 42 | 38 | 35 | 47 | 42 | 38 | 34 | 40 | 37 | 34 | 39 | 36 | 33 | 37 | 35 | 33 | 31 | | | | | | | | |
| 4 | 44 | 38 | 33 | 29 | 43 | 37 | 33 | 29 | 36 | 32 | 29 | 34 | 31 | 28 | 33 | 30 | 28 | 27 | | | | | | | | |
| 5 | 40 | 34 | 29 | 25 | 39 | 33 | 29 | 25 | 32 | 28 | 25 | 31 | 27 | 25 | 30 | 27 | 24 | 23 | | | | | | | | |
| 6 | 37 | 30 | 26 | 22 | 36 | 30 | 25 | 22 | 29 | 25 | 22 | 28 | 24 | 22 | 27 | 24 | 22 | 20 | | | | | | | | |
| 7 | 35 | 27 | 23 | 20 | 34 | 27 | 23 | 20 | 26 | 22 | 19 | 25 | 22 | 19 | 25 | 22 | 19 | 18 | | | | | | | | |
| 8 | 32 | 25 | 21 | 18 | 31 | 25 | 20 | 17 | 24 | 20 | 17 | 23 | 20 | 17 | 23 | 20 | 17 | 16 | | | | | | | | |
| 9 | 30 | 23 | 19 | 16 | 29 | 23 | 19 | 16 | 22 | 18 | 16 | 22 | 18 | 16 | 21 | 18 | 15 | 15 | | | | | | | | |
| 10 | 28 | 21 | 17 | 14 | 28 | 21 | 17 | 14 | 20 | 17 | 14 | 20 | 17 | 14 | 19 | 16 | 14 | 13 | | | | | | | | |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 90° | 180° |
|-----|------|------|------|
| 0° | 4099 | 4099 | 4099 |
| 5° | 4107 | 4099 | 4095 |
| 10° | 4101 | 4086 | 4082 |
| 15° | 4084 | 4060 | 4057 |
| 20° | 4046 | 4022 | 4018 |
| 25° | 4000 | 3979 | 3975 |
| 30° | 3952 | 3926 | 3930 |
| 35° | 3894 | 3871 | 3875 |
| 40° | 3825 | 3796 | 3810 |
| 45° | 3746 | 3714 | 3735 |
| 50° | 3653 | 3618 | 3641 |
| 55° | 3543 | 3498 | 3524 |
| 60° | 3411 | 3359 | 3389 |
| 65° | 3245 | 3200 | 3209 |
| 70° | 3010 | 2988 | 2966 |
| 75° | 2700 | 2700 | 2627 |
| 80° | 2207 | 2207 | 2099 |
| 85° | 1164 | 1207 | 1078 |



TEST NUMBER: 109P152

CATALOG NUMBER: 2P2GX-2U6T8W11FGW.125-5.5-PAF

ZONAL LUMENS:

CANDELA DISTRIBUTION:

| Zone | Lumens | % Fixture | % Lamp | | 0° | 45° | 90° | 135° | 180° | Flux |
|-----------|--------|-----------|--------|------|------|------|------|------|------|------|
| 0°-10° | 103.2 | 3.5 | 1.8 | 0° | 1091 | 1091 | 1091 | 1091 | 1091 | |
| 10°-20° | 294.7 | 10.0 | 5.3 | 5° | 1089 | 1086 | 1087 | 1086 | 1086 | 103 |
| 20°-30° | 442.4 | 14.9 | 7.9 | 15° | 1050 | 1045 | 1044 | 1045 | 1043 | 296 |
| 30°-40° | 527.1 | 17.8 | 9.4 | 25° | 965 | 959 | 960 | 960 | 959 | 445 |
| 40°-50° | 537.5 | 18.2 | 9.6 | 35° | 849 | 838 | 844 | 843 | 845 | 531 |
| 50°-60° | 474.3 | 16.0 | 8.5 | 45° | 705 | 689 | 699 | 697 | 703 | 544 |
| 60°-70° | 349.8 | 11.8 | 6.2 | 55° | 541 | 522 | 534 | 531 | 538 | 483 |
| 70°-80° | 189.1 | 6.4 | 3.4 | 65° | 365 | 343 | 360 | 352 | 361 | 360 |
| 80°-90° | 41.0 | 1.4 | 0.7 | 75° | 186 | 171 | 186 | 177 | 181 | 197 |
| 90°-100° | 0.0 | 0.0 | 0.0 | 85° | 27 | 30 | 28 | 31 | 25 | 40 |
| 100°-110° | 0.0 | 0.0 | 0.0 | 90° | 0 | 0 | 0 | 0 | 0 | 2 |
| 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° | 840.2 | 28.4 | 15.0 | 165° | 0 | 0 | 0 | 0 | 0 | 0 |
| 0°-40° | 1367.4 | 46.2 | 24.4 | 175° | 0 | 0 | 0 | 0 | 0 | 0 |
| 0°-60° | 2379.2 | 80.4 | 42.5 | 180° | 0 | 0 | 0 | 0 | 0 | 0 |
| 0°-90° | 2959.1 | 100.0 | 52.8 | | | | | | | |
| 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° | 2959.1 | 100.0 | 52.8 | | | | | | | |



TEST NUMBER: 109P152

CATALOG NUMBER: 2P2GX-2U6T8W11FGW.125-5.5-PAF

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° | 112.5° | 135° | 157.5° | 180° |
|--------|------|-------|------|-------|------|--------|------|--------|------|
| 0° | 1091 | 1091 | 1091 | 1091 | 1091 | 1091 | 1091 | 1091 | 1091 |
| 2.5° | 1091 | 1090 | 1089 | 1089 | 1090 | 1089 | 1089 | 1090 | 1091 |
| 5° | 1089 | 1086 | 1086 | 1085 | 1087 | 1086 | 1086 | 1086 | 1086 |
| 7.5° | 1082 | 1080 | 1079 | 1079 | 1080 | 1079 | 1079 | 1080 | 1080 |
| 10° | 1075 | 1071 | 1071 | 1070 | 1071 | 1070 | 1071 | 1072 | 1070 |
| 12.5° | 1063 | 1060 | 1059 | 1059 | 1059 | 1059 | 1059 | 1060 | 1059 |
| 15° | 1050 | 1046 | 1045 | 1043 | 1044 | 1044 | 1045 | 1046 | 1043 |
| 17.5° | 1032 | 1028 | 1028 | 1026 | 1026 | 1026 | 1028 | 1029 | 1025 |
| 20° | 1012 | 1007 | 1007 | 1006 | 1006 | 1006 | 1008 | 1009 | 1005 |
| 22.5° | 990 | 984 | 984 | 983 | 984 | 985 | 986 | 987 | 983 |
| 25° | 965 | 959 | 959 | 959 | 960 | 960 | 960 | 963 | 959 |
| 27.5° | 939 | 932 | 931 | 932 | 933 | 933 | 934 | 937 | 933 |
| 30° | 911 | 904 | 902 | 904 | 905 | 905 | 905 | 910 | 906 |
| 32.5° | 881 | 873 | 871 | 874 | 875 | 876 | 875 | 880 | 876 |
| 35° | 849 | 841 | 838 | 842 | 844 | 843 | 843 | 848 | 845 |
| 37.5° | 816 | 806 | 803 | 808 | 810 | 809 | 808 | 814 | 811 |
| 40° | 780 | 770 | 767 | 771 | 774 | 773 | 773 | 779 | 777 |
| 42.5° | 744 | 732 | 729 | 734 | 738 | 735 | 735 | 742 | 740 |
| 45° | 705 | 693 | 689 | 694 | 699 | 697 | 697 | 703 | 703 |
| 47.5° | 666 | 653 | 649 | 653 | 660 | 657 | 657 | 664 | 664 |
| 50° | 625 | 612 | 608 | 612 | 619 | 616 | 616 | 623 | 623 |
| 52.5° | 584 | 569 | 565 | 569 | 577 | 574 | 574 | 581 | 581 |
| 55° | 541 | 526 | 522 | 526 | 534 | 531 | 531 | 538 | 538 |
| 57.5° | 497 | 482 | 477 | 483 | 491 | 487 | 486 | 494 | 495 |
| 60° | 454 | 437 | 433 | 438 | 447 | 443 | 442 | 450 | 451 |
| 62.5° | 409 | 392 | 388 | 394 | 404 | 398 | 397 | 405 | 406 |
| 65° | 365 | 347 | 343 | 349 | 360 | 354 | 352 | 359 | 361 |
| 67.5° | 319 | 302 | 298 | 306 | 316 | 310 | 308 | 314 | 316 |
| 70° | 274 | 258 | 255 | 262 | 272 | 266 | 263 | 269 | 270 |
| 72.5° | 230 | 213 | 212 | 219 | 229 | 224 | 220 | 224 | 226 |
| 75° | 186 | 171 | 171 | 178 | 186 | 181 | 177 | 181 | 181 |
| 77.5° | 144 | 130 | 132 | 136 | 143 | 139 | 137 | 138 | 139 |
| 80° | 102 | 91 | 93 | 96 | 102 | 98 | 97 | 98 | 97 |
| 82.5° | 62 | 56 | 58 | 59 | 61 | 61 | 61 | 61 | 56 |
| 85° | 27 | 27 | 30 | 29 | 28 | 30 | 31 | 29 | 25 |
| 87.5° | 15 | 14 | 14 | 14 | 14 | 15 | 14 | 14 | 12 |
| 90° | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 92.5° | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 95° | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 97.5° | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 100° | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 102.5° | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 105° | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 107.5° | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 110° | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |



TEST NUMBER: 109P152

CATALOG NUMBER: 2P2GX-2U6T8W11FGW.125-5.5-PAF

CANDELA DISTRIBUTION (continued):

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

(END OF REPORT)