

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: 126P105

Luminaire Tested: **2GC-SS-2U6A**

Issue Date: 3/3/2020



Test Information

Test Method: LM-41-14
Report Number: 126P105
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 2GC-SS-2U6A
Description: 2 X 2 Recessed Troffer with silver steel housing
and a .095 pattern 12 acrylic lens.
Light Source: : Two-FB40CW/6 - 2950 Lumens ea. - 40 Watts ea.
Ballast/Driver: -

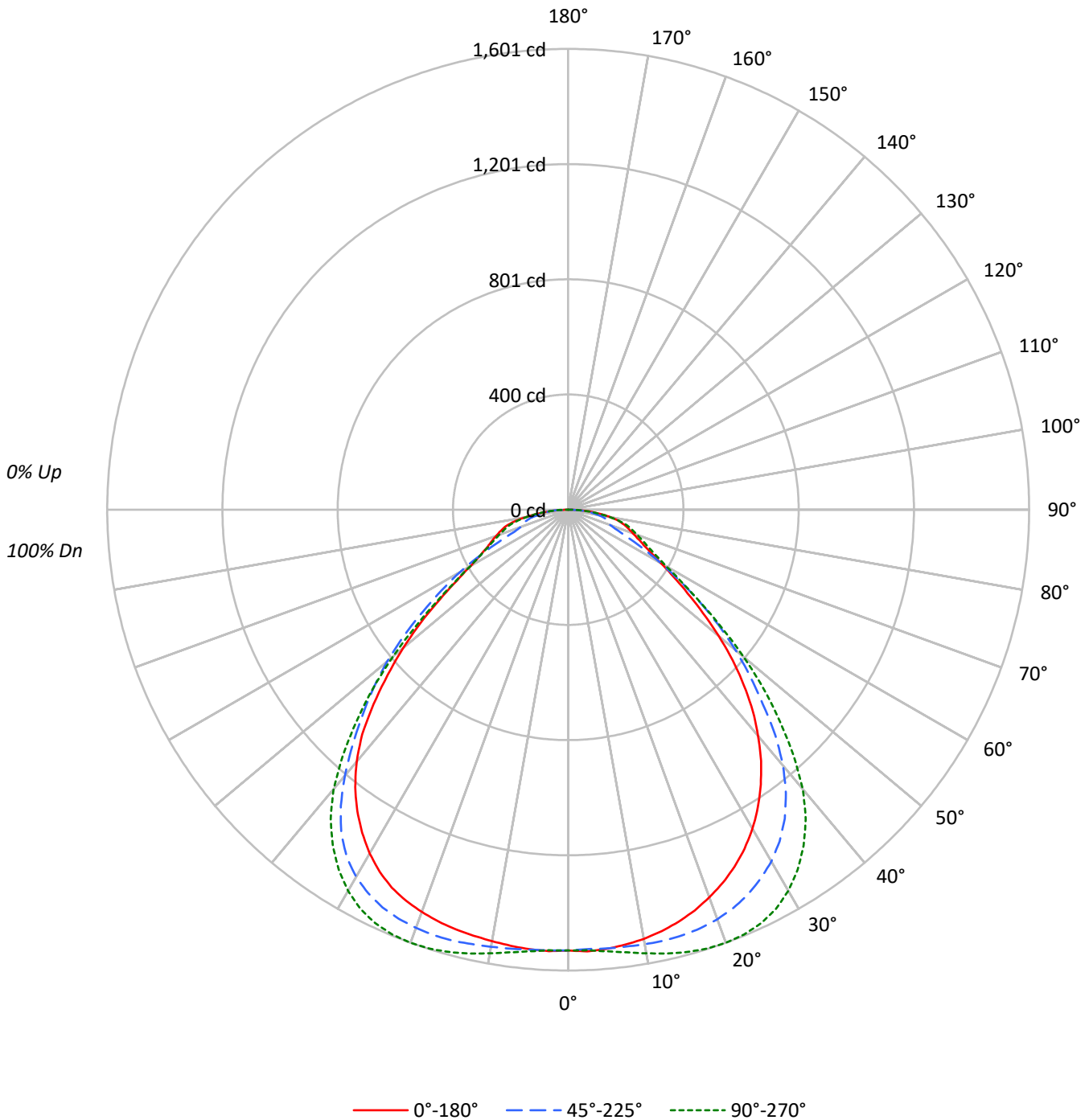
Summary

Lumens per Lamp: 2950 (2 lamps)
Luminaire Lumens: 3903.6 lumens
Efficiency: 66.2%
Efficacy: 46.7 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.42 / 1.37
Luminous Opening: Rectangular (W 1.78' x L: 1.81' x H: 0')
CIE Type: Direct

Input Watts (W): 83.5
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

TEST NUMBER: 126P105
CATALOG NUMBER: 2GC-SS-2U6A

Luminous Intensity Polar Plot





TEST NUMBER: 126P105
 CATALOG NUMBER: 2GC-SS-2U6A

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 | 79 | 79 | 79 | 79 | 77 | 77 | 77 | 77 | 74 | 74 | 74 | | 70 | 70 | 70 | | 68 | 68 | 68 | 66 |
| 1 | 73 | 70 | 67 | 65 | 71 | 68 | 66 | 64 | 65 | 64 | 62 | | 63 | 61 | 60 | | 61 | 59 | 58 | 57 |
| 2 | 67 | 62 | 58 | 54 | 65 | 61 | 57 | 54 | 58 | 55 | 52 | | 56 | 53 | 51 | | 54 | 52 | 50 | 49 |
| 3 | 61 | 55 | 50 | 46 | 60 | 54 | 49 | 46 | 52 | 48 | 45 | | 50 | 47 | 44 | | 49 | 46 | 43 | 42 |
| 4 | 57 | 49 | 44 | 40 | 55 | 48 | 43 | 39 | 47 | 42 | 39 | | 45 | 41 | 38 | | 44 | 41 | 38 | 36 |
| 5 | 52 | 44 | 39 | 35 | 51 | 44 | 38 | 34 | 42 | 38 | 34 | | 41 | 37 | 34 | | 40 | 36 | 33 | 32 |
| 6 | 48 | 40 | 35 | 31 | 47 | 40 | 34 | 30 | 38 | 34 | 30 | | 37 | 33 | 30 | | 36 | 33 | 30 | 28 |
| 7 | 45 | 37 | 31 | 27 | 44 | 36 | 31 | 27 | 35 | 30 | 27 | | 34 | 30 | 27 | | 33 | 29 | 27 | 25 |
| 8 | 42 | 33 | 28 | 24 | 41 | 33 | 28 | 24 | 32 | 28 | 24 | | 31 | 27 | 24 | | 31 | 27 | 24 | 23 |
| 9 | 39 | 31 | 26 | 22 | 38 | 30 | 25 | 22 | 30 | 25 | 22 | | 29 | 25 | 22 | | 28 | 24 | 22 | 21 |
| 10 | 37 | 28 | 23 | 20 | 36 | 28 | 23 | 20 | 27 | 23 | 20 | | 27 | 23 | 20 | | 26 | 23 | 20 | 19 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 90° | 180° |
|-----|------|------|------|
| 0° | 5104 | 5104 | 5104 |
| 5° | 5127 | 5154 | 5130 |
| 10° | 5125 | 5298 | 5153 |
| 15° | 5115 | 5491 | 5208 |
| 20° | 5084 | 5680 | 5276 |
| 25° | 5032 | 5831 | 5330 |
| 30° | 4928 | 5886 | 5309 |
| 35° | 4746 | 5800 | 5197 |
| 40° | 4465 | 5514 | 4974 |
| 45° | 4069 | 4903 | 4507 |
| 50° | 3537 | 4123 | 3880 |
| 55° | 2941 | 3243 | 3168 |
| 60° | 2480 | 2620 | 2607 |
| 65° | 2280 | 2414 | 2453 |
| 70° | 2320 | 2476 | 2593 |
| 75° | 2589 | 2744 | 2898 |
| 80° | 2861 | 2841 | 2937 |
| 85° | 2945 | 2792 | 2601 |



TEST NUMBER: 126P105
 CATALOG NUMBER: 2GC-SS-2U6A

ZONAL LUMENS:

CANDELA DISTRIBUTION:

| Zone | Lumens | % Fixture | % Lamp | | 0° | 45° | 90° | 135° | 180° | Flux |
|-----------|--------|-----------|--------|------|------|------|------|------|------|------|
| 0°-10° | 146.5 | 3.8 | 2.5 | 0° | 1531 | 1531 | 1531 | 1531 | 1531 | |
| 10°-20° | 436.1 | 11.2 | 7.4 | 5° | 1532 | 1530 | 1540 | 1534 | 1533 | 146 |
| 20°-30° | 689.7 | 17.7 | 11.7 | 15° | 1482 | 1531 | 1591 | 1550 | 1509 | 418 |
| 30°-40° | 827.0 | 21.2 | 14.0 | 25° | 1368 | 1476 | 1585 | 1525 | 1449 | 629 |
| 40°-50° | 749.9 | 19.2 | 12.7 | 35° | 1166 | 1311 | 1425 | 1374 | 1277 | 726 |
| 50°-60° | 510.7 | 13.1 | 8.7 | 45° | 863 | 957 | 1040 | 1011 | 956 | 663 |
| 60°-70° | 290.3 | 7.4 | 4.9 | 55° | 506 | 555 | 558 | 614 | 545 | 459 |
| 70°-80° | 182.2 | 4.7 | 3.1 | 65° | 289 | 228 | 306 | 267 | 311 | 292 |
| 80°-90° | 71.2 | 1.8 | 1.2 | 75° | 201 | 139 | 213 | 152 | 225 | 210 |
| 90°-100° | 0.0 | 0.0 | 0.0 | 85° | 77 | 63 | 73 | 67 | 68 | 78 |
| 100°-110° | 0.0 | 0.0 | 0.0 | 90° | 0 | 0 | 0 | 0 | 0 | 6 |
| 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° | 1272.3 | 32.6 | 21.6 | 165° | 0 | 0 | 0 | 0 | 0 | 0 |
| 0°-40° | 2099.3 | 53.8 | 35.6 | 175° | 0 | 0 | 0 | 0 | 0 | 0 |
| 0°-60° | 3359.9 | 86.1 | 56.9 | 180° | 0 | 0 | 0 | 0 | 0 | 0 |
| 0°-90° | 3903.6 | 100.0 | 66.2 | | | | | | | |
| 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° | 3903.6 | 100.0 | 66.2 | | | | | | | |



TEST NUMBER: 126P105
 CATALOG NUMBER: 2GC-SS-2U6A

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° | 112.5° | 135° | 157.5° | 180° |
|--------|------|-------|------|-------|------|--------|------|--------|------|
| 0° | 1531 | 1531 | 1531 | 1531 | 1531 | 1531 | 1531 | 1531 | 1531 |
| 2.5° | 1536 | 1529 | 1528 | 1532 | 1532 | 1532 | 1532 | 1530 | 1535 |
| 5° | 1532 | 1526 | 1530 | 1538 | 1540 | 1538 | 1534 | 1528 | 1533 |
| 7.5° | 1524 | 1521 | 1531 | 1546 | 1551 | 1547 | 1538 | 1527 | 1528 |
| 10° | 1514 | 1513 | 1533 | 1557 | 1565 | 1558 | 1542 | 1525 | 1522 |
| 12.5° | 1500 | 1503 | 1534 | 1567 | 1579 | 1570 | 1546 | 1522 | 1516 |
| 15° | 1482 | 1489 | 1531 | 1575 | 1591 | 1580 | 1550 | 1518 | 1509 |
| 17.5° | 1460 | 1471 | 1525 | 1580 | 1599 | 1587 | 1550 | 1512 | 1500 |
| 20° | 1433 | 1450 | 1514 | 1579 | 1601 | 1587 | 1546 | 1504 | 1487 |
| 22.5° | 1403 | 1424 | 1498 | 1571 | 1597 | 1584 | 1538 | 1493 | 1471 |
| 25° | 1368 | 1392 | 1476 | 1556 | 1585 | 1572 | 1525 | 1475 | 1449 |
| 27.5° | 1327 | 1355 | 1446 | 1534 | 1563 | 1552 | 1503 | 1449 | 1418 |
| 30° | 1280 | 1309 | 1411 | 1499 | 1529 | 1520 | 1473 | 1413 | 1379 |
| 32.5° | 1226 | 1256 | 1366 | 1453 | 1483 | 1474 | 1431 | 1366 | 1331 |
| 35° | 1166 | 1195 | 1311 | 1395 | 1425 | 1413 | 1374 | 1310 | 1277 |
| 37.5° | 1100 | 1125 | 1242 | 1326 | 1355 | 1339 | 1297 | 1243 | 1215 |
| 40° | 1026 | 1048 | 1160 | 1242 | 1267 | 1247 | 1207 | 1160 | 1143 |
| 42.5° | 950 | 960 | 1066 | 1139 | 1158 | 1138 | 1108 | 1066 | 1059 |
| 45° | 863 | 859 | 957 | 1013 | 1040 | 1027 | 1011 | 968 | 956 |
| 47.5° | 775 | 765 | 857 | 890 | 920 | 921 | 917 | 876 | 850 |
| 50° | 682 | 681 | 759 | 780 | 795 | 817 | 821 | 783 | 748 |
| 52.5° | 590 | 597 | 657 | 669 | 670 | 707 | 718 | 685 | 646 |
| 55° | 506 | 515 | 555 | 563 | 558 | 602 | 614 | 588 | 545 |
| 57.5° | 434 | 437 | 457 | 468 | 465 | 513 | 521 | 504 | 457 |
| 60° | 372 | 371 | 371 | 389 | 393 | 436 | 434 | 432 | 391 |
| 62.5° | 324 | 310 | 295 | 325 | 343 | 370 | 346 | 370 | 344 |
| 65° | 289 | 262 | 228 | 274 | 306 | 317 | 267 | 319 | 311 |
| 67.5° | 261 | 229 | 181 | 237 | 279 | 274 | 206 | 278 | 288 |
| 70° | 238 | 205 | 156 | 212 | 254 | 237 | 173 | 247 | 266 |
| 72.5° | 220 | 185 | 144 | 193 | 233 | 203 | 160 | 213 | 246 |
| 75° | 201 | 162 | 139 | 168 | 213 | 173 | 152 | 181 | 225 |
| 77.5° | 179 | 135 | 127 | 141 | 184 | 145 | 134 | 148 | 194 |
| 80° | 149 | 109 | 104 | 118 | 148 | 119 | 106 | 120 | 153 |
| 82.5° | 115 | 89 | 84 | 97 | 109 | 96 | 85 | 97 | 108 |
| 85° | 77 | 65 | 63 | 67 | 73 | 69 | 67 | 70 | 68 |
| 87.5° | 42 | 36 | 33 | 34 | 39 | 38 | 36 | 38 | 31 |
| 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: 126P105
 CATALOG NUMBER: 2GC-SS-2U6A

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)