

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: ITL48350

Luminaire Tested: **2EP3GAX-2BX40S44I**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: ITL48350
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 2EP3GAX-2BX40S44I
Description: FABRICATED METAL HOUSING WITH WHITE PAINTED INTERIOR FINISH,
WHITE PAINTED FORMED METAL BALLAST COVER, FABRICATED DIFFUSE
METAL PARABOLIC 16-CELL LOUVER.
Light Source: TWO 40-WATT SINGLE ENDED TWIN TUBE FLUORESCENTS, G.E.
F40BX/SPX35/IS. LAMPS HORIZONTAL WITH TUBES VERTICAL.
Ballast/Driver: MAGNETEK B340I120HP

Summary

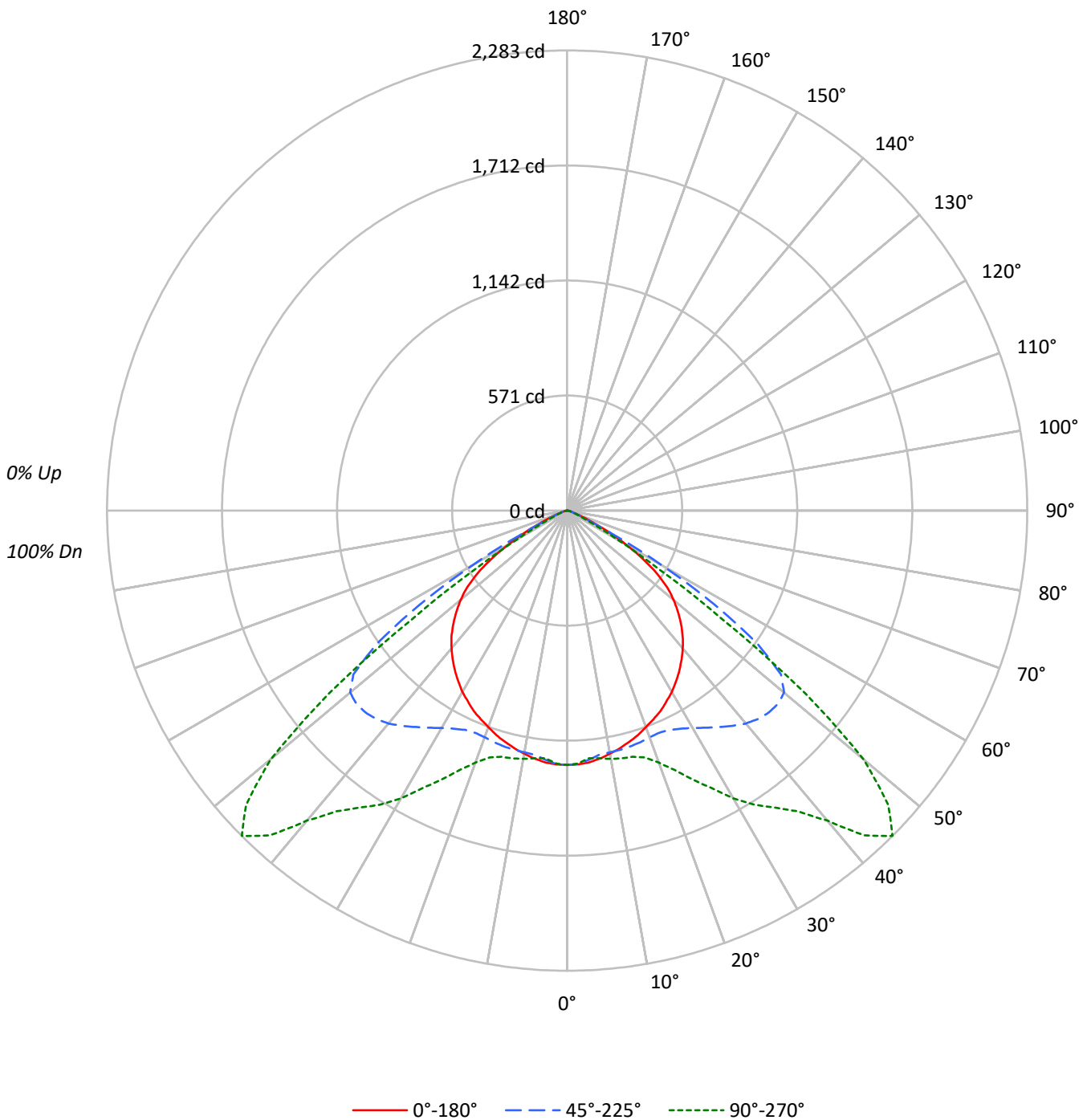
Lumens per Lamp: 3150 (2 lamps)
Luminaire Lumens: 4013.1 lumens
Efficiency: 63.7%
Efficacy: 53.2 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 2.22 / 1.82
Luminous Opening: Rectangular (W 1.73' x L: 1.75' x H: 0')
CIE Type: Direct

Input Watts (W): 75.5
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



TEST NUMBER: ITL48350
CATALOG NUMBER: 2EP3GAX-2BX40S44I

Luminous Intensity Polar Plot





TEST NUMBER: ITL48350

CATALOG NUMBER: 2EP3GAX-2BX40S44I

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 | 76 | 76 | 76 | 76 | 74 | 74 | 74 | 74 | 71 | 71 | 71 | 68 | 68 | 68 | 65 | 65 | 65 | 64 |
| 1 | 71 | 68 | 66 | 64 | 69 | 67 | 65 | 63 | 64 | 62 | 61 | 62 | 60 | 59 | 59 | 58 | 57 | 56 |
| 2 | 65 | 60 | 57 | 54 | 63 | 59 | 56 | 53 | 57 | 54 | 52 | 55 | 53 | 51 | 53 | 51 | 50 | 48 |
| 3 | 60 | 54 | 49 | 45 | 58 | 53 | 48 | 45 | 51 | 47 | 44 | 49 | 46 | 43 | 48 | 45 | 43 | 41 |
| 4 | 55 | 48 | 42 | 39 | 53 | 47 | 42 | 38 | 45 | 41 | 38 | 44 | 40 | 37 | 42 | 39 | 37 | 35 |
| 5 | 50 | 42 | 37 | 33 | 49 | 42 | 37 | 33 | 40 | 36 | 33 | 39 | 35 | 32 | 38 | 35 | 32 | 31 |
| 6 | 46 | 38 | 33 | 29 | 45 | 37 | 32 | 29 | 36 | 32 | 28 | 35 | 31 | 28 | 34 | 31 | 28 | 27 |
| 7 | 43 | 34 | 29 | 25 | 42 | 34 | 29 | 25 | 33 | 28 | 25 | 32 | 28 | 25 | 31 | 27 | 24 | 23 |
| 8 | 40 | 31 | 26 | 22 | 39 | 31 | 26 | 22 | 30 | 25 | 22 | 29 | 25 | 22 | 28 | 25 | 22 | 20 |
| 9 | 37 | 28 | 23 | 20 | 36 | 28 | 23 | 20 | 27 | 23 | 20 | 27 | 22 | 19 | 26 | 22 | 19 | 18 |
| 10 | 34 | 26 | 21 | 18 | 33 | 26 | 21 | 18 | 25 | 21 | 18 | 24 | 20 | 17 | 24 | 20 | 17 | 16 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|------|------|-------|
| 0° | 4476 | 4476 | 4476 |
| 5° | 4464 | 4418 | 4389 |
| 10° | 4411 | 4386 | 4505 |
| 15° | 4362 | 4446 | 4641 |
| 20° | 4314 | 4517 | 5023 |
| 25° | 4293 | 4696 | 5756 |
| 30° | 4255 | 5098 | 6749 |
| 35° | 4199 | 5676 | 7788 |
| 40° | 4129 | 6384 | 9291 |
| 45° | 4012 | 7102 | 11450 |
| 50° | 3807 | 7752 | 10593 |
| 55° | 3357 | 7123 | 5800 |
| 60° | 2397 | 3851 | 2014 |
| 65° | 1217 | 990 | 713 |
| 70° | 508 | 446 | 415 |
| 75° | 315 | 288 | 274 |
| 80° | 204 | 204 | 184 |
| 85° | 122 | 122 | 122 |



TEST NUMBER: ITL48350

CATALOG NUMBER: 2EP3GAX-2BX40S44I

ZONAL LUMENS:

CANDELA DISTRIBUTION:

| Zone | Lumens | % Fixture | % Lamp | | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----------|--------|-----------|--------|-----|------|-------|------|-------|------|------|
| 0°-10° | 118.2 | 2.9 | 1.9 | 0° | 1262 | 1262 | 1262 | 1262 | 1262 | |
| 10°-20° | 344.6 | 8.6 | 5.5 | 5° | 1254 | 1252 | 1241 | 1236 | 1233 | 119 |
| 20°-30° | 577.2 | 14.4 | 9.2 | 15° | 1188 | 1171 | 1211 | 1250 | 1264 | 335 |
| 30°-40° | 842.7 | 21.0 | 13.4 | 25° | 1097 | 1106 | 1200 | 1373 | 1471 | 505 |
| 40°-50° | 1106.3 | 27.6 | 17.6 | 35° | 970 | 1017 | 1311 | 1644 | 1799 | 606 |
| 50°-60° | 823.3 | 20.5 | 13.1 | 45° | 800 | 943 | 1416 | 1968 | 2283 | 615 |
| 60°-70° | 171.0 | 4.3 | 2.7 | 55° | 543 | 800 | 1152 | 1086 | 938 | 474 |
| 70°-80° | 25.9 | 0.6 | 0.4 | 65° | 145 | 204 | 118 | 99 | 85 | 161 |
| 80°-90° | 4.0 | 0.1 | 0.1 | 75° | 23 | 25 | 21 | 22 | 20 | 26 |
| 90°-100° | 0.0 | 0.0 | 0.0 | 85° | 3 | 3 | 3 | 3 | 3 | 4 |
| 100°-110° | 0.0 | 0.0 | 0.0 | 90° | 0 | 0 | 0 | 0 | 0 | |
| 110°-120° | 0.0 | 0.0 | 0.0 | | | | | | | |
| 120°-130° | 0.0 | 0.0 | 0.0 | | | | | | | |
| 130°-140° | 0.0 | 0.0 | 0.0 | | | | | | | |
| 140°-150° | 0.0 | 0.0 | 0.0 | | | | | | | |
| 150°-160° | 0.0 | 0.0 | 0.0 | | | | | | | |
| 160°-170° | 0.0 | 0.0 | 0.0 | | | | | | | |
| 170°-180° | 0.0 | 0.0 | 0.0 | | | | | | | |
| 0°-30° | 1040.0 | 25.9 | 16.5 | | | | | | | |
| 0°-40° | 1882.7 | 46.9 | 29.9 | | | | | | | |
| 0°-60° | 3812.2 | 95.0 | 60.5 | | | | | | | |
| 0°-90° | 4013.1 | 100.0 | 63.7 | | | | | | | |
| 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° | 4013.1 | 100.0 | 63.7 | | | | | | | |



TEST NUMBER: ITL48350

CATALOG NUMBER: 2EP3GAX-2BX40S44I

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|------|-------|------|-------|------|
| 0° | 1262 | 1262 | 1262 | 1262 | 1262 |
| 2.5° | 1260 | 1260 | 1258 | 1257 | 1256 |
| 5° | 1254 | 1252 | 1241 | 1236 | 1233 |
| 7.5° | 1241 | 1236 | 1222 | 1234 | 1240 |
| 10° | 1225 | 1214 | 1218 | 1242 | 1251 |
| 12.5° | 1208 | 1191 | 1216 | 1247 | 1259 |
| 15° | 1188 | 1171 | 1211 | 1250 | 1264 |
| 17.5° | 1168 | 1155 | 1205 | 1252 | 1284 |
| 20° | 1143 | 1140 | 1197 | 1277 | 1331 |
| 22.5° | 1120 | 1125 | 1193 | 1320 | 1392 |
| 25° | 1097 | 1106 | 1200 | 1373 | 1471 |
| 27.5° | 1067 | 1084 | 1220 | 1439 | 1552 |
| 30° | 1039 | 1065 | 1245 | 1507 | 1648 |
| 32.5° | 1005 | 1043 | 1277 | 1583 | 1730 |
| 35° | 970 | 1017 | 1311 | 1644 | 1799 |
| 37.5° | 932 | 995 | 1346 | 1697 | 1880 |
| 40° | 892 | 974 | 1379 | 1761 | 2007 |
| 42.5° | 849 | 960 | 1402 | 1849 | 2186 |
| 45° | 800 | 943 | 1416 | 1968 | 2283 |
| 47.5° | 746 | 925 | 1419 | 1973 | 2161 |
| 50° | 690 | 902 | 1405 | 1805 | 1920 |
| 52.5° | 626 | 865 | 1337 | 1506 | 1489 |
| 55° | 543 | 800 | 1152 | 1086 | 938 |
| 57.5° | 443 | 693 | 865 | 662 | 538 |
| 60° | 338 | 539 | 543 | 339 | 284 |
| 62.5° | 238 | 358 | 265 | 181 | 147 |
| 65° | 145 | 204 | 118 | 99 | 85 |
| 67.5° | 80 | 106 | 65 | 62 | 57 |
| 70° | 49 | 57 | 43 | 44 | 40 |
| 72.5° | 32 | 36 | 31 | 31 | 29 |
| 75° | 23 | 25 | 21 | 22 | 20 |
| 77.5° | 15 | 17 | 15 | 15 | 14 |
| 80° | 10 | 11 | 10 | 10 | 9 |
| 82.5° | 6 | 6 | 6 | 6 | 5 |
| 85° | 3 | 3 | 3 | 3 | 3 |
| 87.5° | 0 | 1 | 1 | 1 | 0 |
| 90° | 0 | 0 | 0 | 0 | 0 |

(END OF REPORT)