

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: CORELITE

Report Number: 89190

Luminaire Tested: **E2-SH-3T5-DL-5**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: 89190
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: E2-SH-3T5-DL-5
Description: CORELITE ELEMENT SUSPENDED LUMINAIRE
WHITE INTERIOR WITH SPECULAR REFLECTORS AND 38 CELL HI PERFORMANCE LOUVER
BLADE
WITH DOWNLIGHT ISOLATORS
Light Source: 54 WATT T5 LAMP
FP54T5/841HO. LUMEN RATING = 4500 LMS.
Ballast/Driver: -

Summary

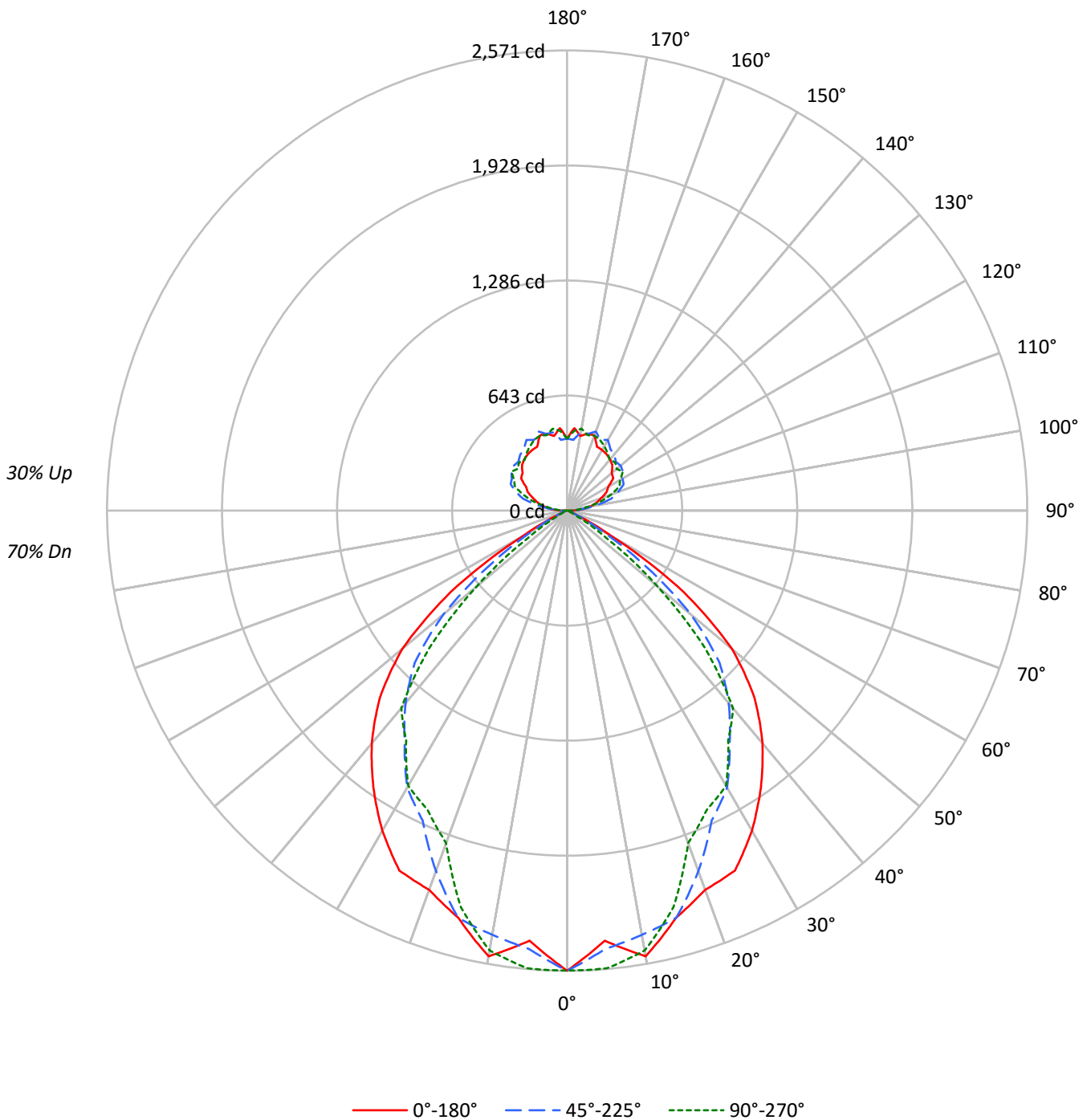
Lumens per Lamp: 4500 (3 lamps)
Luminaire Lumens: 6226.6 lumens
Efficiency: 46.1%
Efficacy: 35.2 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.02 / 1.18
Luminous Opening: Rectangular w/ Sides (W: 0.57' x L: 3.98' x H: 0.33')
CIE Type: Semi-Direct

Input Watts (W): 177
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 | | | | | | | | | |
| RC | 80 | | | | | | | | | 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 | 52 | 52 | 52 | 52 | 49 | 49 | 49 | 49 | 44 | 44 | 44 | 39 | 39 | 39 | 34 | 34 | 34 | 34 | 34 | 34 | 34 | 34 | 34 | 32 | | | | | | | | | | | | | |
| 1 | 48 | 46 | 45 | 44 | 46 | 44 | 43 | 42 | 40 | 39 | 38 | 36 | 35 | 34 | 32 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 29 | | | | | | | | | | | | | |
| 2 | 45 | 42 | 39 | 37 | 42 | 40 | 38 | 36 | 36 | 34 | 33 | 32 | 31 | 30 | 29 | 28 | 28 | 28 | 28 | 28 | 28 | 28 | 28 | 26 | | | | | | | | | | | | | |
| 3 | 41 | 37 | 35 | 32 | 39 | 36 | 33 | 31 | 33 | 30 | 29 | 30 | 28 | 27 | 27 | 26 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 23 | | | | | | | | | | | | | |
| 4 | 38 | 34 | 31 | 28 | 36 | 32 | 29 | 27 | 30 | 27 | 25 | 27 | 25 | 24 | 24 | 23 | 22 | 22 | 22 | 22 | 22 | 22 | 22 | 21 | | | | | | | | | | | | | |
| 5 | 35 | 31 | 27 | 25 | 34 | 29 | 26 | 24 | 27 | 24 | 22 | 25 | 23 | 21 | 22 | 21 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 18 | | | | | | | | | | | | | |
| 6 | 33 | 28 | 24 | 22 | 31 | 27 | 24 | 21 | 25 | 22 | 20 | 22 | 20 | 19 | 21 | 19 | 18 | 18 | 18 | 18 | 18 | 18 | 18 | 17 | | | | | | | | | | | | | |
| 7 | 31 | 25 | 22 | 20 | 29 | 24 | 21 | 19 | 22 | 20 | 18 | 21 | 19 | 17 | 19 | 17 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 15 | | | | | | | | | | | | | |
| 8 | 29 | 23 | 20 | 18 | 27 | 22 | 19 | 17 | 21 | 18 | 16 | 19 | 17 | 15 | 18 | 16 | 14 | 14 | 14 | 14 | 14 | 14 | 14 | 14 | | | | | | | | | | | | | |
| 9 | 27 | 21 | 18 | 16 | 25 | 21 | 18 | 15 | 19 | 17 | 15 | 18 | 16 | 14 | 16 | 15 | 13 | 13 | 13 | 13 | 13 | 13 | 13 | 12 | | | | | | | | | | | | | |
| 10 | 25 | 20 | 17 | 14 | 24 | 19 | 16 | 14 | 18 | 15 | 13 | 16 | 14 | 13 | 15 | 13 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 11 | | | | | | | | | | | | | |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|-------|-------|-------|
| 0° | 12092 | 12092 | 12092 |
| 5° | 11307 | 11151 | 11540 |
| 10° | 11905 | 10624 | 10821 |
| 15° | 11214 | 10199 | 9679 |
| 20° | 10955 | 9174 | 8180 |
| 25° | 11085 | 8147 | 7546 |
| 30° | 10701 | 7645 | 7239 |
| 35° | 10242 | 6853 | 6419 |
| 40° | 9746 | 6199 | 5966 |
| 45° | 9096 | 5463 | 4612 |
| 50° | 8004 | 4252 | 2858 |
| 55° | 5841 | 2513 | 1198 |
| 60° | 2359 | 1017 | 310 |
| 65° | 568 | 299 | 85 |
| 70° | 246 | 157 | 40 |
| 75° | 136 | 117 | 20 |
| 80° | 120 | 77 | 7 |
| 85° | 169 | 77 | 26 |



TEST NUMBER: 89190

CATALOG NUMBER: E2-SH-3T5-DL-5

ZONAL LUMENS:

| Zone | Lumens | % Fixture | % Lamp |
|-----------|--------|-----------|--------|
| 0°-10° | 237.3 | 3.8 | 1.8 |
| 10°-20° | 651.9 | 10.5 | 4.8 |
| 20°-30° | 920.0 | 14.8 | 6.8 |
| 30°-40° | 1042.3 | 16.7 | 7.7 |
| 40°-50° | 943.6 | 15.2 | 7.0 |
| 50°-60° | 470.4 | 7.6 | 3.5 |
| 60°-70° | 72.2 | 1.2 | 0.5 |
| 70°-80° | 13.6 | 0.2 | 0.1 |
| 80°-90° | 11.3 | 0.2 | 0.1 |
| 90°-100° | 89.2 | 1.4 | 0.7 |
| 100°-110° | 223.8 | 3.6 | 1.7 |
| 110°-120° | 305.1 | 4.9 | 2.3 |
| 120°-130° | 324.4 | 5.2 | 2.4 |
| 130°-140° | 297.1 | 4.8 | 2.2 |
| 140°-150° | 257.1 | 4.1 | 1.9 |
| 150°-160° | 200.9 | 3.2 | 1.5 |
| 160°-170° | 125.6 | 2.0 | 0.9 |
| 170°-180° | 40.8 | 0.7 | 0.3 |
| 0°-30° | 1809.1 | 29.1 | 13.4 |
| 0°-40° | 2851.4 | 45.8 | 21.1 |
| 0°-60° | 4265.4 | 68.5 | 31.6 |
| 0°-90° | 4362.5 | 70.1 | 32.3 |
| 90°-120° | 618.1 | 9.9 | 4.6 |
| 90°-150° | 1496.7 | 24.0 | 11.1 |
| 90°-180° | 1864.0 | 29.9 | 13.8 |
| 0°-180° | 6226.6 | 100.0 | 46.1 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|------|-------|------|-------|------|------|
| 0° | 2571 | 2571 | 2571 | 2571 | 2571 | |
| 5° | 2412 | 2461 | 2458 | 2576 | 2567 | 236 |
| 15° | 2354 | 2391 | 2356 | 2219 | 2294 | 669 |
| 25° | 2219 | 2147 | 1911 | 1855 | 1844 | 1011 |
| 35° | 1887 | 1770 | 1583 | 1554 | 1569 | 1180 |
| 45° | 1481 | 1352 | 1204 | 1158 | 1093 | 1131 |
| 55° | 797 | 672 | 510 | 343 | 266 | 685 |
| 65° | 60 | 60 | 54 | 28 | 17 | 105 |
| 75° | 10 | 16 | 18 | 8 | 4 | 13 |
| 85° | 6 | 6 | 9 | 8 | 4 | 6 |
| 90° | 22 | 18 | 18 | 24 | 16 | 19 |
| 95° | 88 | 91 | 78 | 79 | 58 | 76 |
| 105° | 169 | 211 | 254 | 215 | 191 | 177 |
| 115° | 242 | 288 | 347 | 336 | 323 | 235 |
| 125° | 314 | 342 | 379 | 416 | 380 | 273 |
| 135° | 357 | 381 | 385 | 396 | 380 | 273 |
| 145° | 384 | 411 | 420 | 409 | 394 | 240 |
| 155° | 394 | 424 | 435 | 447 | 435 | 187 |
| 165° | 445 | 439 | 443 | 430 | 436 | 125 |
| 175° | 462 | 412 | 396 | 432 | 446 | 42 |
| 180° | 402 | 402 | 402 | 402 | 402 | |



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CATALOG NUMBER: E2-SH-3T5-DL-5

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|------|--------|--------|--------|--------|--------|
| 0° | 2570.6 | 2570.6 | 2570.6 | 2570.6 | 2570.6 |
| 5° | 2411.9 | 2461.1 | 2457.8 | 2576.1 | 2567.1 |
| 10° | 2528.9 | 2400.2 | 2407.1 | 2453.5 | 2495.7 |
| 15° | 2354.0 | 2390.6 | 2356.0 | 2218.6 | 2294.4 |
| 20° | 2254.8 | 2300.6 | 2143.6 | 2067.8 | 1976.9 |
| 25° | 2218.6 | 2146.6 | 1910.9 | 1855.2 | 1844.5 |
| 30° | 2064.7 | 1965.3 | 1786.5 | 1727.1 | 1776.1 |
| 35° | 1887.4 | 1770.1 | 1583.0 | 1554.3 | 1568.8 |
| 40° | 1698.0 | 1536.8 | 1404.6 | 1455.9 | 1441.4 |
| 45° | 1481.2 | 1352.1 | 1204.2 | 1157.9 | 1092.8 |
| 50° | 1202.2 | 1057.4 | 904.0 | 736.1 | 658.8 |
| 55° | 796.9 | 671.9 | 510.5 | 343.3 | 266.2 |
| 60° | 286.9 | 261.2 | 195.5 | 101.6 | 65.9 |
| 65° | 60.1 | 59.9 | 53.8 | 27.6 | 17.1 |
| 70° | 22.0 | 26.8 | 26.1 | 14.7 | 7.6 |
| 75° | 9.8 | 15.6 | 17.6 | 7.7 | 3.5 |
| 80° | 6.5 | 10.6 | 10.3 | 4.5 | 1.1 |
| 85° | 6.1 | 6.4 | 9.0 | 8.2 | 3.7 |
| 90° | 22.5 | 18.0 | 18.1 | 23.6 | 15.7 |
| 95° | 88.3 | 90.9 | 78.1 | 79.3 | 58.0 |
| 100° | 130.6 | 157.1 | 158.0 | 152.3 | 111.6 |
| 105° | 168.9 | 210.9 | 254.2 | 215.3 | 191.1 |
| 110° | 201.2 | 255.2 | 302.1 | 292.6 | 260.6 |
| 115° | 242.0 | 287.6 | 347.4 | 336.5 | 322.9 |
| 120° | 264.8 | 301.9 | 357.1 | 373.4 | 340.5 |
| 125° | 313.9 | 342.5 | 379.4 | 415.6 | 379.5 |
| 130° | 325.1 | 359.4 | 390.3 | 393.9 | 361.2 |
| 135° | 357.2 | 380.8 | 384.8 | 395.8 | 380.1 |
| 140° | 373.1 | 409.3 | 407.9 | 406.4 | 369.6 |
| 145° | 383.9 | 411.4 | 420.0 | 409.0 | 393.6 |
| 150° | 390.4 | 425.4 | 455.2 | 419.2 | 414.7 |
| 155° | 393.9 | 424.2 | 435.2 | 446.7 | 435.0 |
| 160° | 446.2 | 438.1 | 469.7 | 457.4 | 445.2 |
| 165° | 445.2 | 438.8 | 443.3 | 430.3 | 436.4 |
| 170° | 422.4 | 449.0 | 443.2 | 432.2 | 464.2 |
| 175° | 462.0 | 412.4 | 396.1 | 431.7 | 446.4 |
| 180° | 401.7 | 401.7 | 401.7 | 401.7 | 401.7 |

(END OF REPORT)