

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: 89163

Luminaire Tested: **E2-SB-3T5-DUD-3**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: 89163
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: E2-SB-3T5-DUD-3
Description: CORELITE ELEMENT SUSPENDED LUMINAIRE
WHITE INTERIOR WITH SPECULAR REFLECTORS AND 19 CELL SEMI-SPECULAR LOUVER
BLADE
WITH LAMP ISOLATORS
Light Source: 54 WATT T5 LAMPS
FP54T5/841HO. LUMEN RATING = 4500 LMS.
Ballast/Driver: -

Summary

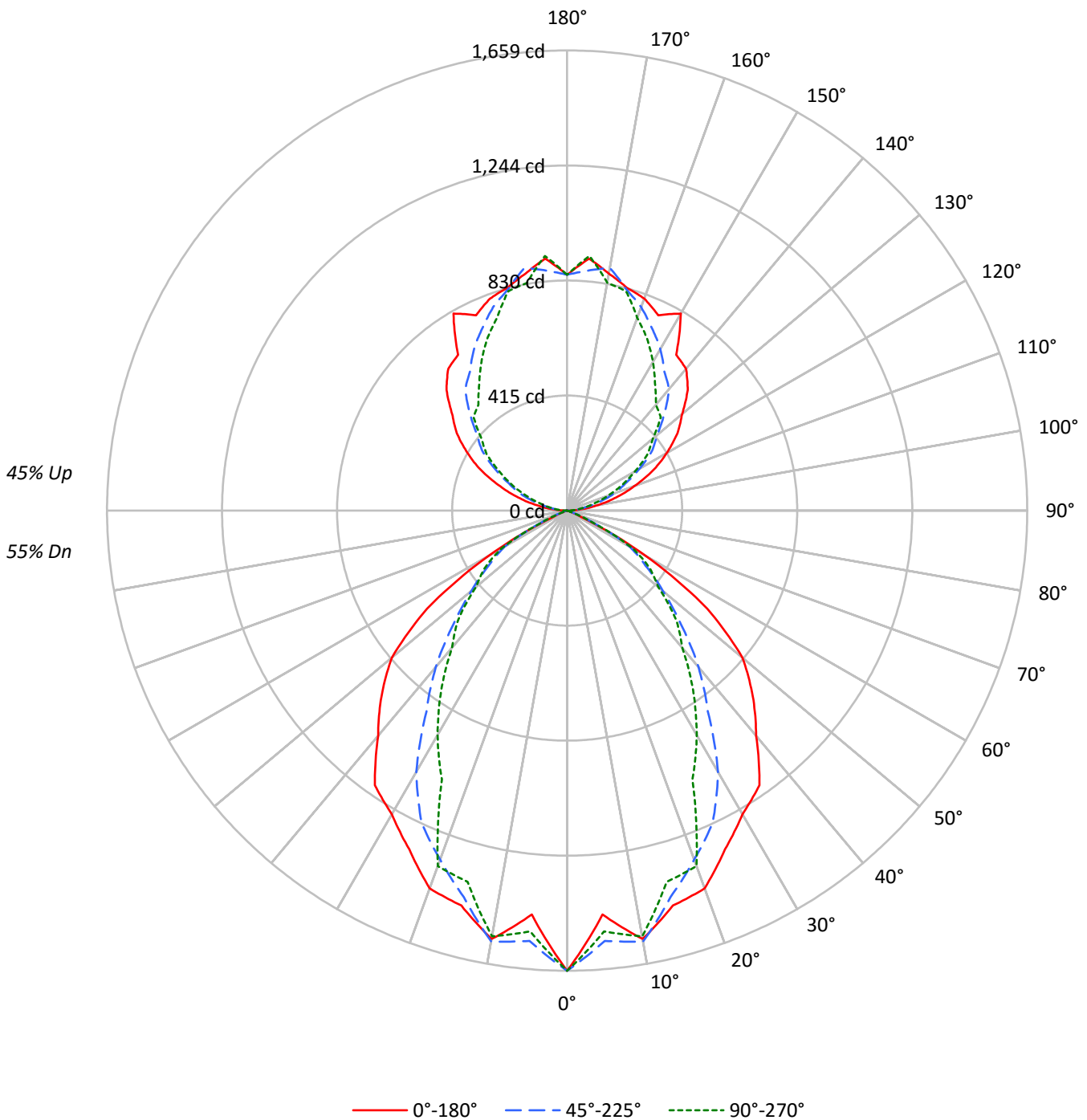
Lumens per Lamp: 4500 (3 lamps)
Luminaire Lumens: 4943.0 lumens
Efficiency: 36.6%
Efficacy: 27.9 lumens/watt
Spacing Criteria (0/90/45): 1.14 / 0.91 / 1.07
Luminous Opening: Rectangular w/ Sides (W: 0.57' x L: 4.02' x H: 0.33')
CIE Type: General Diffuse

Input Watts (W): 177
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: 89163
CATALOG NUMBER: E2-SB-3T5-DUD-3

Luminous Intensity Polar Plot





TEST NUMBER: 89163

CATALOG NUMBER: E2-SB-3T5-DUD-3

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 | 40 | 40 | 40 | 40 | 37 | 37 | 37 | 37 | 32 | 32 | 32 | 27 | 27 | 27 | 22 | 22 | 22 | 20 |
| 1 | 37 | 35 | 34 | 33 | 34 | 33 | 32 | 31 | 28 | 28 | 27 | 24 | 24 | 23 | 21 | 20 | 20 | 18 |
| 2 | 34 | 32 | 30 | 28 | 31 | 29 | 28 | 26 | 26 | 24 | 23 | 22 | 21 | 20 | 19 | 18 | 18 | 16 |
| 3 | 31 | 28 | 26 | 24 | 29 | 26 | 24 | 23 | 23 | 21 | 20 | 20 | 19 | 18 | 17 | 16 | 15 | 14 |
| 4 | 29 | 25 | 23 | 21 | 27 | 24 | 21 | 20 | 21 | 19 | 18 | 18 | 17 | 16 | 15 | 15 | 14 | 13 |
| 5 | 27 | 23 | 20 | 18 | 25 | 21 | 19 | 17 | 19 | 17 | 15 | 16 | 15 | 14 | 14 | 13 | 12 | 11 |
| 6 | 25 | 21 | 18 | 16 | 23 | 19 | 17 | 15 | 17 | 15 | 14 | 15 | 13 | 12 | 13 | 12 | 11 | 10 |
| 7 | 23 | 19 | 16 | 14 | 21 | 18 | 15 | 13 | 16 | 14 | 12 | 14 | 12 | 11 | 12 | 11 | 10 | 9 |
| 8 | 21 | 17 | 14 | 13 | 20 | 16 | 14 | 12 | 14 | 12 | 11 | 13 | 11 | 10 | 11 | 10 | 9 | 8 |
| 9 | 20 | 16 | 13 | 11 | 19 | 15 | 12 | 11 | 13 | 11 | 10 | 12 | 10 | 9 | 10 | 9 | 8 | 7 |
| 10 | 19 | 14 | 12 | 10 | 17 | 14 | 11 | 10 | 12 | 10 | 9 | 11 | 9 | 8 | 10 | 8 | 8 | 7 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|------|------|------|
| 0° | 7736 | 7736 | 7736 |
| 5° | 6793 | 7003 | 6786 |
| 10° | 7319 | 6902 | 6698 |
| 15° | 6962 | 6187 | 5794 |
| 20° | 6982 | 5679 | 5593 |
| 25° | 6674 | 5248 | 4336 |
| 30° | 6496 | 4615 | 3774 |
| 35° | 6503 | 3794 | 3211 |
| 40° | 6036 | 3223 | 2652 |
| 45° | 5768 | 2606 | 2323 |
| 50° | 5449 | 2102 | 1842 |
| 55° | 4486 | 1683 | 1628 |
| 60° | 2667 | 1342 | 1281 |
| 65° | 544 | 581 | 506 |
| 70° | 119 | 120 | 67 |
| 75° | 59 | 63 | 23 |
| 80° | 35 | 37 | 10 |
| 85° | 14 | 19 | 4 |



TEST NUMBER: 89163

CATALOG NUMBER: E2-SB-3T5-DUD-3

ZONAL LUMENS:

| Zone | Lumens | % Fixture | % Lamp |
|-----------|--------|-----------|--------|
| 0°-10° | 149.2 | 3.0 | 1.1 |
| 10°-20° | 408.7 | 8.3 | 3.0 |
| 20°-30° | 566.3 | 11.5 | 4.2 |
| 30°-40° | 592.2 | 12.0 | 4.4 |
| 40°-50° | 513.8 | 10.4 | 3.8 |
| 50°-60° | 361.6 | 7.3 | 2.7 |
| 60°-70° | 114.4 | 2.3 | 0.8 |
| 70°-80° | 9.4 | 0.2 | 0.1 |
| 80°-90° | 2.8 | 0.1 | 0.0 |
| 90°-100° | 40.1 | 0.8 | 0.3 |
| 100°-110° | 138.9 | 2.8 | 1.0 |
| 110°-120° | 251.9 | 5.1 | 1.9 |
| 120°-130° | 346.0 | 7.0 | 2.6 |
| 130°-140° | 397.1 | 8.0 | 2.9 |
| 140°-150° | 395.8 | 8.0 | 2.9 |
| 150°-160° | 338.9 | 6.9 | 2.5 |
| 160°-170° | 232.5 | 4.7 | 1.7 |
| 170°-180° | 83.2 | 1.7 | 0.6 |
| 0°-30° | 1124.3 | 22.7 | 8.3 |
| 0°-40° | 1716.4 | 34.7 | 12.7 |
| 0°-60° | 2591.8 | 52.4 | 19.2 |
| 0°-90° | 2718.4 | 55.0 | 20.1 |
| 90°-120° | 430.9 | 8.7 | 3.2 |
| 90°-150° | 1569.8 | 31.8 | 11.6 |
| 90°-180° | 2225.0 | 45.0 | 16.5 |
| 0°-180° | 4943.0 | 100.0 | 36.6 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|------|-------|------|-------|------|------|
| 0° | 1659 | 1659 | 1659 | 1659 | 1659 | |
| 5° | 1462 | 1613 | 1557 | 1569 | 1523 | 146 |
| 15° | 1474 | 1476 | 1442 | 1416 | 1386 | 421 |
| 25° | 1347 | 1306 | 1242 | 1153 | 1069 | 624 |
| 35° | 1209 | 1121 | 884 | 787 | 792 | 743 |
| 45° | 947 | 804 | 579 | 528 | 555 | 730 |
| 55° | 617 | 452 | 345 | 351 | 365 | 532 |
| 65° | 58 | 62 | 105 | 115 | 103 | 111 |
| 75° | 4 | 9 | 10 | 6 | 4 | 6 |
| 85° | 0 | 1 | 2 | 1 | 0 | 1 |
| 90° | 4 | 4 | 4 | 3 | 3 | 8 |
| 95° | 49 | 36 | 31 | 29 | 30 | 56 |
| 105° | 183 | 145 | 121 | 112 | 101 | 194 |
| 115° | 341 | 275 | 232 | 227 | 219 | 335 |
| 125° | 486 | 418 | 373 | 338 | 354 | 431 |
| 135° | 615 | 548 | 496 | 468 | 477 | 471 |
| 145° | 685 | 696 | 611 | 587 | 553 | 447 |
| 155° | 777 | 768 | 724 | 700 | 683 | 369 |
| 165° | 832 | 851 | 825 | 787 | 819 | 236 |
| 175° | 912 | 847 | 869 | 880 | 921 | 85 |
| 180° | 850 | 850 | 850 | 850 | 850 | |



TEST NUMBER: 89163

CATALOG NUMBER: E2-SB-3T5-DUD-3

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|------|--------|--------|--------|--------|--------|
| 0° | 1659.2 | 1659.2 | 1659.2 | 1659.2 | 1659.2 |
| 5° | 1462.0 | 1612.8 | 1557.4 | 1568.8 | 1523.0 |
| 10° | 1568.4 | 1569.3 | 1577.6 | 1445.2 | 1558.6 |
| 15° | 1474.2 | 1476.5 | 1441.9 | 1416.0 | 1385.7 |
| 20° | 1449.5 | 1413.6 | 1338.8 | 1334.6 | 1363.8 |
| 25° | 1347.3 | 1305.7 | 1241.8 | 1152.7 | 1069.3 |
| 30° | 1264.2 | 1227.0 | 1087.9 | 955.7 | 934.2 |
| 35° | 1208.6 | 1120.8 | 884.1 | 786.7 | 791.7 |
| 40° | 1060.4 | 967.0 | 736.5 | 645.0 | 646.4 |
| 45° | 947.0 | 803.6 | 579.4 | 528.0 | 555.3 |
| 50° | 825.2 | 628.3 | 450.6 | 429.1 | 428.3 |
| 55° | 617.0 | 452.5 | 344.9 | 350.9 | 365.1 |
| 60° | 326.9 | 237.5 | 260.0 | 270.5 | 274.6 |
| 65° | 58.0 | 62.4 | 105.2 | 115.4 | 102.6 |
| 70° | 10.7 | 17.3 | 20.0 | 19.8 | 12.7 |
| 75° | 4.3 | 9.3 | 9.6 | 6.2 | 4.0 |
| 80° | 1.9 | 5.0 | 5.0 | 3.8 | 1.6 |
| 85° | 0.5 | 1.4 | 2.3 | 1.3 | 0.5 |
| 90° | 4.5 | 3.5 | 3.6 | 3.2 | 3.4 |
| 95° | 49.2 | 35.5 | 30.6 | 29.1 | 30.3 |
| 100° | 110.9 | 86.2 | 66.5 | 65.8 | 63.3 |
| 105° | 182.8 | 144.7 | 121.1 | 112.0 | 101.3 |
| 110° | 257.2 | 202.0 | 180.4 | 170.8 | 157.0 |
| 115° | 341.2 | 275.1 | 231.5 | 226.7 | 219.0 |
| 120° | 414.8 | 346.9 | 300.3 | 288.5 | 282.2 |
| 125° | 485.5 | 418.2 | 373.1 | 337.7 | 353.9 |
| 130° | 540.8 | 503.9 | 423.2 | 406.2 | 402.7 |
| 135° | 614.9 | 548.5 | 495.9 | 467.6 | 477.0 |
| 140° | 667.1 | 621.2 | 571.9 | 528.7 | 497.6 |
| 145° | 685.3 | 695.5 | 611.1 | 587.0 | 552.8 |
| 150° | 820.0 | 744.1 | 672.1 | 647.1 | 618.2 |
| 155° | 777.0 | 767.8 | 724.3 | 700.3 | 682.6 |
| 160° | 813.2 | 814.4 | 780.2 | 749.8 | 739.1 |
| 165° | 831.7 | 851.2 | 825.3 | 786.9 | 819.3 |
| 170° | 867.2 | 898.7 | 887.9 | 849.3 | 833.3 |
| 175° | 911.6 | 846.6 | 868.7 | 880.4 | 921.3 |
| 180° | 849.9 | 849.9 | 849.9 | 849.9 | 849.9 |

(END OF REPORT)