

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: 89372

Luminaire Tested: **VB-SB-3T5-XDX-1**

Issue Date: 3/3/2020

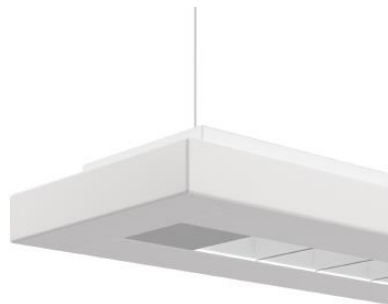
**Test Information**

Test Method: LM-41-14  
Report Number: 89372  
Test Lab:  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: VB-SB-3T5-XDX-1  
Description: CORELITE VERTECHS 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 (1 lamp)  
Luminaire Lumens: 1737.6 lumens  
Efficiency: 38.6%  
Efficacy: 29.5 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 0.98 / 1.16  
Luminous Opening: Rectangular w/ Sides (W: 0.57' x L: 4.02' x H: 0.33')  
CIE Type: Direct

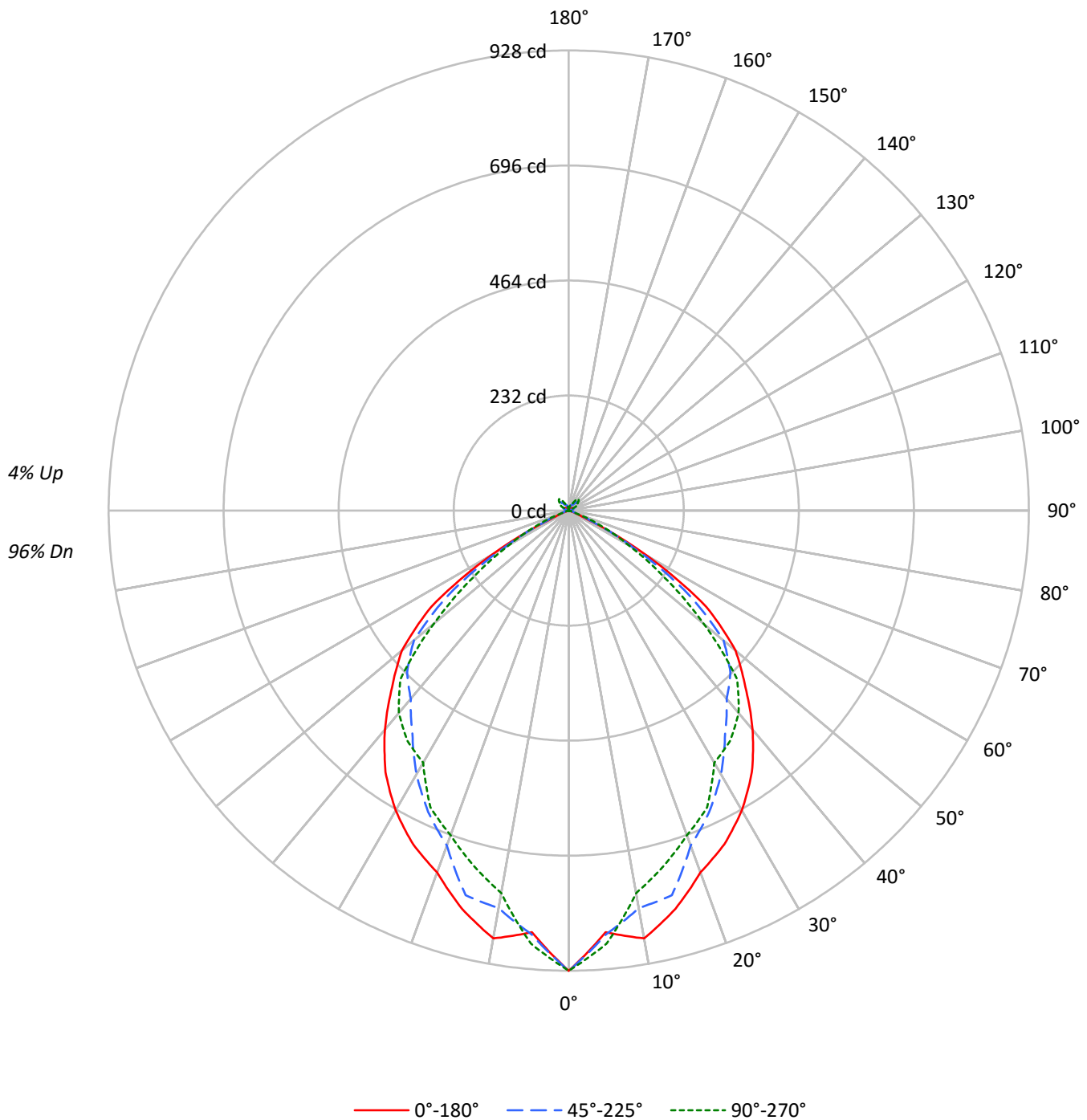
Input Watts (W): 59  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

|     |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|-----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| RF  | 20 |    |    |    | 20 |    |    |    |    | 20 |    |    |    |    | 20 |    |    |    |    | 20 |
| RC  | 80 |    |    |    | 70 |    |    |    |    | 50 |    |    |    |    | 30 |    |    |    |    | 10 |
| RW  | 70 | 50 | 30 | 10 | 70 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 |
| RCR |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 0   | 46 | 46 | 46 | 46 | 44 | 44 | 44 | 44 | 42 | 42 | 42 | 40 | 40 | 40 | 38 | 38 | 38 | 37 | 37 | 37 |
| 1   | 43 | 41 | 40 | 39 | 42 | 40 | 39 | 38 | 38 | 37 | 37 | 37 | 36 | 35 | 35 | 34 | 34 | 33 | 33 | 33 |
| 2   | 40 | 37 | 35 | 33 | 38 | 36 | 34 | 33 | 35 | 33 | 32 | 33 | 32 | 31 | 32 | 31 | 30 | 29 | 29 | 29 |
| 3   | 37 | 33 | 31 | 29 | 36 | 33 | 30 | 28 | 31 | 29 | 28 | 30 | 28 | 27 | 29 | 27 | 26 | 25 | 25 | 25 |
| 4   | 34 | 30 | 27 | 25 | 33 | 29 | 27 | 25 | 28 | 26 | 24 | 27 | 25 | 24 | 26 | 25 | 23 | 22 | 22 | 22 |
| 5   | 31 | 27 | 24 | 22 | 31 | 27 | 24 | 22 | 26 | 23 | 21 | 25 | 23 | 21 | 24 | 22 | 21 | 20 | 20 | 20 |
| 6   | 29 | 25 | 22 | 19 | 28 | 24 | 21 | 19 | 23 | 21 | 19 | 23 | 20 | 19 | 22 | 20 | 18 | 18 | 18 | 18 |
| 7   | 27 | 22 | 19 | 17 | 26 | 22 | 19 | 17 | 21 | 19 | 17 | 21 | 18 | 17 | 20 | 18 | 17 | 16 | 16 | 16 |
| 8   | 25 | 21 | 18 | 16 | 25 | 20 | 17 | 15 | 20 | 17 | 15 | 19 | 17 | 15 | 19 | 16 | 15 | 14 | 14 | 14 |
| 9   | 24 | 19 | 16 | 14 | 23 | 19 | 16 | 14 | 18 | 16 | 14 | 18 | 15 | 14 | 17 | 15 | 14 | 13 | 13 | 13 |
| 10  | 22 | 18 | 15 | 13 | 22 | 17 | 15 | 13 | 17 | 14 | 13 | 16 | 14 | 13 | 16 | 14 | 12 | 12 | 12 | 12 |

**AVERAGE LUMINANCE (cd/sqm):**

|     | 0°   | 45°  | 90°  |
|-----|------|------|------|
| 0°  | 4328 | 4328 | 4328 |
| 5°  | 3965 | 3859 | 3906 |
| 10° | 4089 | 3562 | 3366 |
| 15° | 3927 | 3447 | 3099 |
| 20° | 3741 | 3050 | 2858 |
| 25° | 3678 | 2834 | 2677 |
| 30° | 3588 | 2605 | 2372 |
| 35° | 3466 | 2359 | 2300 |
| 40° | 3284 | 2169 | 2186 |
| 45° | 3067 | 2073 | 2007 |
| 50° | 2900 | 1900 | 1530 |
| 55° | 2464 | 1444 | 1050 |
| 60° | 1495 | 796  | 640  |
| 65° | 322  | 274  | 339  |
| 70° | 77   | 88   | 79   |
| 75° | 41   | 57   | 31   |
| 80° | 16   | 39   | 13   |
| 85° | 8    | 14   | 4    |



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture | % Lamp |
|-----------|--------|-----------|--------|
| 0°-10°    | 81.3   | 4.7       | 1.8    |
| 10°-20°   | 221.4  | 12.7      | 4.9    |
| 20°-30°   | 316.2  | 18.2      | 7.0    |
| 30°-40°   | 359.7  | 20.7      | 8.0    |
| 40°-50°   | 360.0  | 20.7      | 8.0    |
| 50°-60°   | 251.2  | 14.5      | 5.6    |
| 60°-70°   | 68.5   | 3.9       | 1.5    |
| 70°-80°   | 8.2    | 0.5       | 0.2    |
| 80°-90°   | 1.6    | 0.1       | 0.0    |
| 90°-100°  | 1.8    | 0.1       | 0.0    |
| 100°-110° | 5.7    | 0.3       | 0.1    |
| 110°-120° | 12.0   | 0.7       | 0.3    |
| 120°-130° | 16.6   | 1.0       | 0.4    |
| 130°-140° | 15.6   | 0.9       | 0.3    |
| 140°-150° | 10.3   | 0.6       | 0.2    |
| 150°-160° | 5.1    | 0.3       | 0.1    |
| 160°-170° | 2.1    | 0.1       | 0.0    |
| 170°-180° | 0.4    | 0.0       | 0.0    |
| 0°-30°    | 618.8  | 35.6      | 13.8   |
| 0°-40°    | 978.5  | 56.3      | 21.7   |
| 0°-60°    | 1589.7 | 91.5      | 35.3   |
| 0°-90°    | 1668.0 | 96.0      | 37.1   |
| 90°-120°  | 19.4   | 1.1       | 0.4    |
| 90°-150°  | 61.9   | 3.6       | 1.4    |
| 90°-180°  | 70.0   | 4.0       | 1.6    |
| 0°-180°   | 1737.6 | 100.0     | 38.6   |

**CANDELA DISTRIBUTION:**

|      | 0°  | 22.5° | 45° | 67.5° | 90° | Flux |
|------|-----|-------|-----|-------|-----|------|
| 0°   | 928 | 928   | 928 | 928   | 928 |      |
| 5°   | 853 | 831   | 858 | 861   | 877 | 83   |
| 15°  | 832 | 811   | 803 | 761   | 741 | 234  |
| 25°  | 742 | 723   | 671 | 669   | 660 | 342  |
| 35°  | 644 | 591   | 550 | 542   | 567 | 401  |
| 45°  | 504 | 461   | 461 | 478   | 480 | 391  |
| 55°  | 339 | 326   | 296 | 240   | 236 | 290  |
| 65°  | 34  | 40    | 50  | 67    | 69  | 63   |
| 75°  | 3   | 6     | 9   | 8     | 5   | 4    |
| 85°  | 0   | 1     | 2   | 1     | 0   | 0    |
| 90°  | 1   | 0     | 0   | 0     | 0   | 1    |
| 95°  | 6   | 2     | 1   | 0     | 0   | 4    |
| 105° | 8   | 12    | 3   | 2     | 1   | 8    |
| 115° | 8   | 16    | 17  | 8     | 4   | 8    |
| 125° | 8   | 16    | 21  | 23    | 23  | 8    |
| 135° | 8   | 13    | 24  | 28    | 28  | 6    |
| 145° | 7   | 10    | 15  | 22    | 28  | 4    |
| 155° | 5   | 8     | 13  | 14    | 13  | 2    |
| 165° | 4   | 6     | 8   | 9     | 11  | 1    |
| 175° | 4   | 4     | 4   | 5     | 4   | 0    |
| 180° | 4   | 4     | 4   | 4     | 4   |      |



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**CANDELA DISTRIBUTION (FULL):**

|      | 0°    | 22.5° | 45°   | 67.5° | 90°   |
|------|-------|-------|-------|-------|-------|
| 0°   | 928.2 | 928.2 | 928.2 | 928.2 | 928.2 |
| 5°   | 853.4 | 830.8 | 858.2 | 861.4 | 876.6 |
| 10°  | 876.2 | 831.4 | 814.1 | 813.4 | 783.3 |
| 15°  | 831.5 | 811.4 | 803.2 | 760.9 | 741.3 |
| 20°  | 776.6 | 774.2 | 718.9 | 710.0 | 696.8 |
| 25°  | 742.5 | 723.0 | 670.6 | 668.9 | 660.3 |
| 30°  | 698.3 | 653.9 | 614.0 | 592.7 | 587.2 |
| 35°  | 644.1 | 590.8 | 549.7 | 542.0 | 567.1 |
| 40°  | 576.9 | 529.6 | 495.7 | 526.3 | 532.8 |
| 45°  | 503.6 | 461.2 | 460.9 | 478.3 | 479.8 |
| 50°  | 439.2 | 394.1 | 407.4 | 370.4 | 355.7 |
| 55°  | 338.9 | 326.4 | 295.9 | 239.9 | 235.6 |
| 60°  | 183.3 | 190.2 | 154.3 | 136.2 | 137.1 |
| 65°  | 34.4  | 40.4  | 49.6  | 66.6  | 68.8  |
| 70°  | 6.9   | 10.8  | 14.7  | 21.6  | 15.0  |
| 75°  | 3.0   | 5.6   | 8.7   | 8.2   | 5.4   |
| 80°  | 0.9   | 2.9   | 5.3   | 4.1   | 2.0   |
| 85°  | 0.3   | 1.0   | 1.7   | 1.3   | 0.5   |
| 90°  | 0.7   | 0.2   | 0.2   | 0.1   | 0.0   |
| 95°  | 6.1   | 2.0   | 0.8   | 0.5   | 0.1   |
| 100° | 7.6   | 5.8   | 1.8   | 0.9   | 0.3   |
| 105° | 7.9   | 12.0  | 3.4   | 1.5   | 0.6   |
| 110° | 7.3   | 15.7  | 9.0   | 2.5   | 1.4   |
| 115° | 8.0   | 15.8  | 16.8  | 8.2   | 3.9   |
| 120° | 8.5   | 17.4  | 18.5  | 20.0  | 16.8  |
| 125° | 8.5   | 15.9  | 20.8  | 22.6  | 23.0  |
| 130° | 8.9   | 12.5  | 24.6  | 23.9  | 23.0  |
| 135° | 7.7   | 13.0  | 24.1  | 27.5  | 28.2  |
| 140° | 7.1   | 12.5  | 19.6  | 30.2  | 30.4  |
| 145° | 6.7   | 10.2  | 15.2  | 22.1  | 27.9  |
| 150° | 5.7   | 10.2  | 13.4  | 15.3  | 17.3  |
| 155° | 4.9   | 7.9   | 12.7  | 14.3  | 13.4  |
| 160° | 4.4   | 6.0   | 9.7   | 12.1  | 11.4  |
| 165° | 4.1   | 5.6   | 8.1   | 8.6   | 10.9  |
| 170° | 4.0   | 4.3   | 6.5   | 5.9   | 6.4   |
| 175° | 4.1   | 3.7   | 4.3   | 4.9   | 3.6   |
| 180° | 3.6   | 3.6   | 3.6   | 3.6   | 3.6   |

(END OF REPORT)