

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: ITL63568

Luminaire Tested: **VB-SW-1T5-1C-120**

Issue Date: 3/3/2020

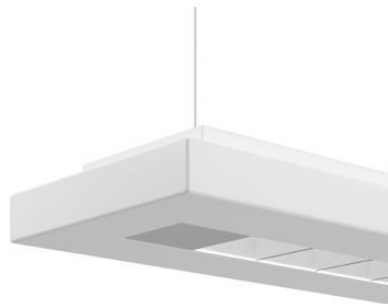
**Test Information**

Test Method: LM-41-14  
Report Number: ITL63568  
Test Lab: INDEPENDENT TESTING LABORATORIES, INC.  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: VB-SW-1T5-1C-120  
Description: EXTRUDED METAL HOUSING WITH UNFINISHED METAL END PLATES,  
FORMED WHITE PAINTED METAL REFLECTORS, ONE FORMED METAL  
REFLECTOR INSERT ON EACH SIDE WITH PREMIUM SPECULAR FINISH,  
FABRICATED WHITE PAINTED METAL 18-CELL LOUVER, OPEN TOP.  
Light Source: ONE 54-WATT T-5 SYLVANIA FP54/841/HO/ECO LINEAR FLUORESCENT.  
Ballast/Driver: UNIVERSAL B254PUNV-D

**Summary**

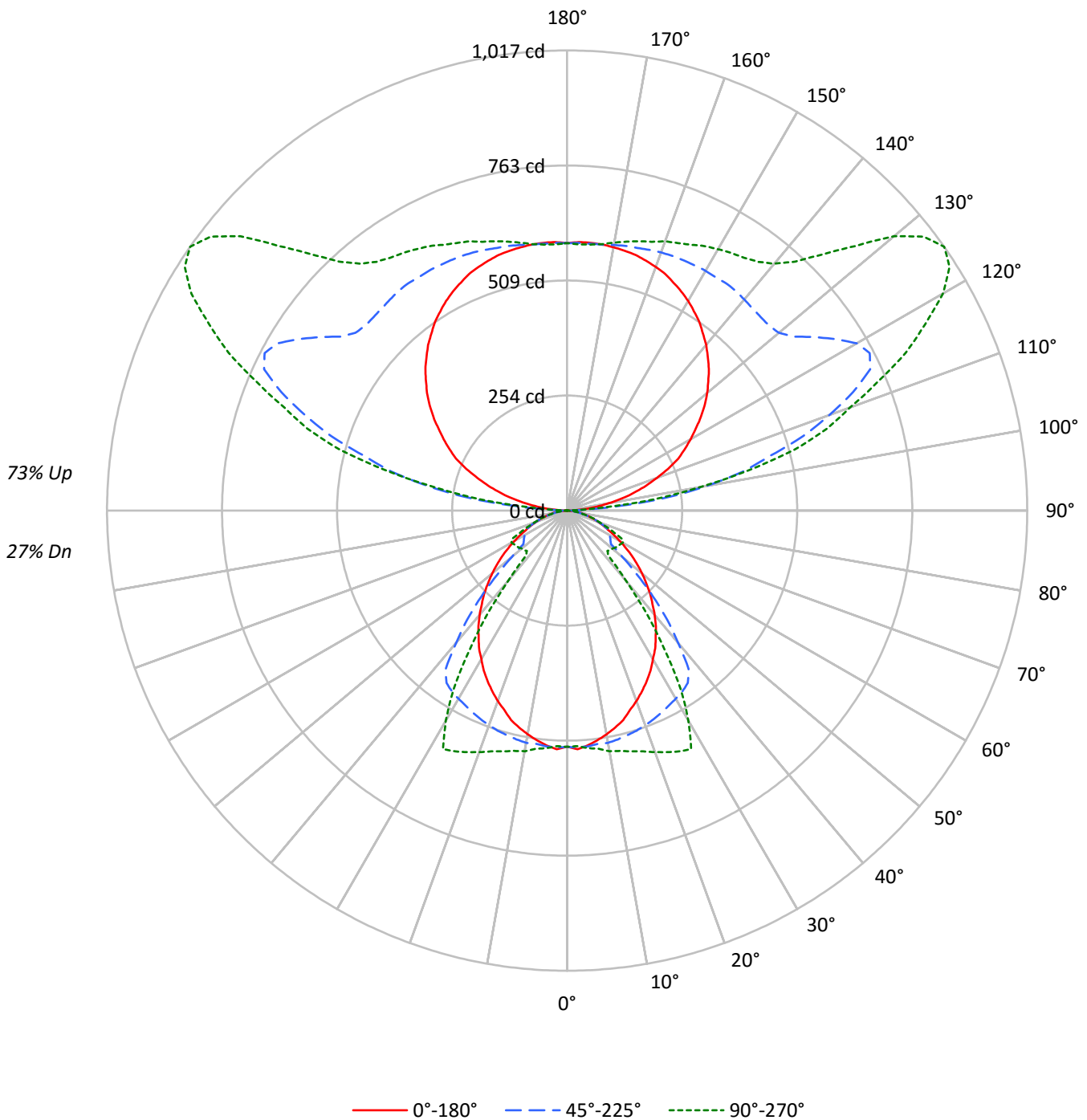
Lumens per Lamp: 4450 (1 lamp)  
Luminaire Lumens: 4305.8 lumens  
Efficiency: 96.8%  
Efficacy: 68.6 lumens/watt  
Spacing Criteria (0/90/45): 1.1 / 1.3 / 1.28  
Luminous Opening: Rectangular (W 0.47' x L: 3.99' x H: 0')  
CIE Type: Semi-Indirect

Input Watts (W): 62.8  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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 | 0  |
| RW  | 70 | 50 | 30 | 10 | 70 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 0  |
| RCR |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 0   | 98 | 98 | 98 | 98 | 88 | 88 | 88 | 88 | 68 | 68 | 68 | 50 | 50 | 50 | 34 | 34 | 34 | 26 |
| 1   | 90 | 86 | 82 | 79 | 80 | 77 | 74 | 71 | 60 | 58 | 56 | 45 | 43 | 42 | 30 | 30 | 29 | 23 |
| 2   | 82 | 75 | 70 | 65 | 73 | 68 | 63 | 59 | 53 | 50 | 47 | 40 | 38 | 36 | 27 | 26 | 25 | 19 |
| 3   | 75 | 67 | 60 | 55 | 67 | 60 | 54 | 50 | 47 | 43 | 40 | 35 | 33 | 31 | 24 | 23 | 22 | 17 |
| 4   | 69 | 59 | 52 | 46 | 61 | 53 | 47 | 42 | 42 | 38 | 34 | 32 | 29 | 26 | 22 | 20 | 19 | 15 |
| 5   | 63 | 53 | 45 | 40 | 56 | 47 | 41 | 36 | 38 | 33 | 30 | 28 | 25 | 23 | 20 | 18 | 17 | 13 |
| 6   | 58 | 47 | 40 | 34 | 52 | 43 | 36 | 32 | 34 | 29 | 26 | 26 | 23 | 20 | 18 | 16 | 15 | 12 |
| 7   | 54 | 43 | 35 | 30 | 48 | 38 | 32 | 28 | 31 | 26 | 23 | 23 | 20 | 18 | 17 | 15 | 13 | 10 |
| 8   | 50 | 39 | 31 | 27 | 44 | 35 | 29 | 24 | 28 | 23 | 20 | 21 | 18 | 16 | 15 | 13 | 12 | 9  |
| 9   | 46 | 35 | 28 | 24 | 41 | 32 | 26 | 22 | 26 | 21 | 18 | 20 | 17 | 14 | 14 | 12 | 11 | 9  |
| 10  | 43 | 32 | 26 | 21 | 39 | 29 | 23 | 19 | 24 | 19 | 16 | 18 | 15 | 13 | 13 | 11 | 10 | 8  |

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

|     | 0°   | 45°  | 90°  |
|-----|------|------|------|
| 0°  | 3004 | 3004 | 3004 |
| 5°  | 3010 | 3022 | 3045 |
| 10° | 2934 | 3045 | 3156 |
| 15° | 2854 | 3063 | 3283 |
| 20° | 2744 | 3093 | 3479 |
| 25° | 2642 | 3131 | 3728 |
| 30° | 2519 | 3190 | 3562 |
| 35° | 2396 | 3267 | 2642 |
| 40° | 2262 | 2863 | 1518 |
| 45° | 2108 | 2181 | 1026 |
| 50° | 1934 | 1433 | 1173 |
| 55° | 1756 | 1174 | 1375 |
| 60° | 1543 | 1243 | 1635 |
| 65° | 1348 | 1348 | 1553 |
| 70° | 1212 | 1245 | 1296 |
| 75° | 1112 | 1090 | 1112 |
| 80° | 1028 | 928  | 928  |
| 85° | 859  | 660  | 594  |



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture | % Lamp |
|-----------|--------|-----------|--------|
| 0°-10°    | 49.8   | 1.2       | 1.1    |
| 10°-20°   | 145.3  | 3.4       | 3.3    |
| 20°-30°   | 228.7  | 5.3       | 5.1    |
| 30°-40°   | 250.6  | 5.8       | 5.6    |
| 40°-50°   | 179.8  | 4.2       | 4.0    |
| 50°-60°   | 137.7  | 3.2       | 3.1    |
| 60°-70°   | 102.4  | 2.4       | 2.3    |
| 70°-80°   | 53.2   | 1.2       | 1.2    |
| 80°-90°   | 12.9   | 0.3       | 0.3    |
| 90°-100°  | 123.6  | 2.9       | 2.8    |
| 100°-110° | 438.3  | 10.2      | 9.8    |
| 110°-120° | 610.5  | 14.2      | 13.7   |
| 120°-130° | 606.9  | 14.1      | 13.6   |
| 130°-140° | 479.4  | 11.1      | 10.8   |
| 140°-150° | 379.4  | 8.8       | 8.5    |
| 150°-160° | 280.6  | 6.5       | 6.3    |
| 160°-170° | 170.2  | 4.0       | 3.8    |
| 170°-180° | 56.6   | 1.3       | 1.3    |
| 0°-30°    | 423.8  | 9.8       | 9.5    |
| 0°-40°    | 674.4  | 15.7      | 15.2   |
| 0°-60°    | 991.9  | 23.0      | 22.3   |
| 0°-90°    | 1160.4 | 27.0      | 26.1   |
| 90°-120°  | 1172.4 | 27.2      | 26.3   |
| 90°-150°  | 2638.0 | 61.3      | 59.3   |
| 90°-180°  | 3145.0 | 73.0      | 70.7   |
| 0°-180°   | 4305.8 | 100.0     | 96.8   |

**CANDELA DISTRIBUTION:**

|      | 0°  | 22.5° | 45° | 67.5° | 90°  | Flux |
|------|-----|-------|-----|-------|------|------|
| 0°   | 522 | 522   | 522 | 522   | 522  |      |
| 5°   | 521 | 520   | 523 | 525   | 527  | 49   |
| 15°  | 479 | 487   | 514 | 539   | 551  | 134  |
| 25°  | 416 | 439   | 493 | 553   | 587  | 191  |
| 35°  | 341 | 381   | 465 | 425   | 376  | 213  |
| 45°  | 259 | 307   | 268 | 133   | 126  | 199  |
| 55°  | 175 | 215   | 117 | 128   | 137  | 156  |
| 65°  | 99  | 100   | 99  | 114   | 114  | 100  |
| 75°  | 50  | 49    | 49  | 50    | 50   | 53   |
| 85°  | 13  | 13    | 10  | 9     | 9    | 14   |
| 90°  | 0   | 0     | 0   | 0     | 0    | 3    |
| 95°  | 38  | 132   | 115 | 105   | 84   | 43   |
| 105° | 153 | 385   | 462 | 513   | 520  | 162  |
| 115° | 271 | 392   | 739 | 820   | 826  | 264  |
| 125° | 361 | 445   | 668 | 936   | 1017 | 322  |
| 135° | 443 | 499   | 605 | 733   | 801  | 341  |
| 145° | 509 | 544   | 613 | 664   | 682  | 318  |
| 155° | 556 | 575   | 610 | 638   | 648  | 257  |
| 165° | 585 | 588   | 601 | 612   | 616  | 165  |
| 175° | 594 | 591   | 592 | 591   | 590  | 57   |
| 180° | 591 | 591   | 591 | 591   | 591  |      |



TEST NUMBER: ITL63568

CATALOG NUMBER: VB-SW-1T5-1C-120

**CANDELA DISTRIBUTION (FULL):**

|        | 0°  | 22.5° | 45° | 67.5° | 90° |
|--------|-----|-------|-----|-------|-----|
| 0°     | 522 | 522   | 522 | 522   | 522 |
| 2.5°   | 528 | 525   | 524 | 522   | 521 |
| 5°     | 521 | 520   | 523 | 525   | 527 |
| 7.5°   | 512 | 512   | 520 | 528   | 531 |
| 10°    | 502 | 507   | 521 | 533   | 540 |
| 12.5°  | 491 | 496   | 518 | 535   | 544 |
| 15°    | 479 | 487   | 514 | 539   | 551 |
| 17.5°  | 462 | 478   | 510 | 542   | 558 |
| 20°    | 448 | 465   | 505 | 545   | 568 |
| 22.5°  | 432 | 453   | 499 | 549   | 578 |
| 25°    | 416 | 439   | 493 | 553   | 587 |
| 27.5°  | 399 | 426   | 486 | 557   | 594 |
| 30°    | 379 | 410   | 480 | 551   | 536 |
| 32.5°  | 362 | 396   | 474 | 496   | 467 |
| 35°    | 341 | 381   | 465 | 425   | 376 |
| 37.5°  | 322 | 362   | 441 | 341   | 292 |
| 40°    | 301 | 345   | 381 | 269   | 202 |
| 42.5°  | 279 | 325   | 327 | 188   | 134 |
| 45°    | 259 | 307   | 268 | 133   | 126 |
| 47.5°  | 237 | 288   | 210 | 127   | 129 |
| 50°    | 216 | 267   | 160 | 127   | 131 |
| 52.5°  | 195 | 245   | 122 | 127   | 134 |
| 55°    | 175 | 215   | 117 | 128   | 137 |
| 57.5°  | 154 | 180   | 113 | 127   | 139 |
| 60°    | 134 | 146   | 108 | 126   | 142 |
| 62.5°  | 116 | 118   | 104 | 125   | 138 |
| 65°    | 99  | 100   | 99  | 114   | 114 |
| 67.5°  | 85  | 84    | 88  | 93    | 94  |
| 70°    | 72  | 72    | 74  | 77    | 77  |
| 72.5°  | 62  | 61    | 62  | 64    | 64  |
| 75°    | 50  | 49    | 49  | 50    | 50  |
| 77.5°  | 39  | 39    | 37  | 39    | 36  |
| 80°    | 31  | 31    | 28  | 29    | 28  |
| 82.5°  | 20  | 20    | 17  | 18    | 15  |
| 85°    | 13  | 13    | 10  | 9     | 9   |
| 87.5°  | 6   | 5     | 3   | 3     | 3   |
| 90°    | 0   | 0     | 0   | 0     | 0   |
| 92.5°  | 15  | 50    | 26  | 13    | 9   |
| 95°    | 38  | 132   | 115 | 105   | 84  |
| 97.5°  | 66  | 194   | 224 | 208   | 197 |
| 100°   | 94  | 265   | 311 | 322   | 298 |
| 102.5° | 125 | 333   | 397 | 420   | 410 |
| 105°   | 153 | 385   | 462 | 513   | 520 |
| 107.5° | 183 | 402   | 547 | 585   | 602 |
| 110°   | 211 | 398   | 616 | 659   | 665 |



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CATALOG NUMBER: VB-SW-1T5-1C-120

**CANDELA DISTRIBUTION (continued):**

|        | 0°  | 22.5° | 45° | 67.5° | 90°  |
|--------|-----|-------|-----|-------|------|
| 112.5° | 241 | 392   | 684 | 747   | 743  |
| 115°   | 271 | 392   | 739 | 820   | 826  |
| 117.5° | 292 | 399   | 754 | 881   | 892  |
| 120°   | 315 | 412   | 739 | 934   | 959  |
| 122.5° | 337 | 426   | 705 | 951   | 1002 |
| 125°   | 361 | 445   | 668 | 936   | 1017 |
| 127.5° | 383 | 458   | 631 | 893   | 994  |
| 130°   | 404 | 474   | 611 | 834   | 943  |
| 132.5° | 423 | 487   | 605 | 778   | 866  |
| 135°   | 443 | 499   | 605 | 733   | 801  |
| 137.5° | 460 | 512   | 606 | 699   | 746  |
| 140°   | 478 | 523   | 609 | 680   | 712  |
| 142.5° | 493 | 534   | 612 | 671   | 693  |
| 145°   | 509 | 544   | 613 | 664   | 682  |
| 147.5° | 522 | 552   | 611 | 658   | 675  |
| 150°   | 535 | 562   | 612 | 653   | 667  |
| 152.5° | 546 | 568   | 611 | 645   | 659  |
| 155°   | 556 | 575   | 610 | 638   | 648  |
| 157.5° | 566 | 579   | 609 | 633   | 640  |
| 160°   | 573 | 583   | 607 | 625   | 633  |
| 162.5° | 579 | 586   | 604 | 618   | 623  |
| 165°   | 585 | 588   | 601 | 612   | 616  |
| 167.5° | 588 | 589   | 599 | 605   | 609  |
| 170°   | 591 | 590   | 596 | 599   | 601  |
| 172.5° | 593 | 590   | 593 | 594   | 594  |
| 175°   | 594 | 591   | 592 | 591   | 590  |
| 177.5° | 594 | 591   | 592 | 590   | 589  |
| 180°   | 591 | 591   | 591 | 591   | 591  |

(END OF REPORT)