

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: 89324

Luminaire Tested: **VB-SB-3T5-DL-4**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: 89324
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: VB-SB-3T5-DL-4
Description: CORELITE VERTECHS SUSPENDED LUMINAIRE
WHITE INTERIOR WITH SPECULAR REFLECTORS AND 19 CELL SEMI-SPECULAR LOUVER
BLADE
WITH DOWNLIGHT ISOLATORS
Light Source: 54 WATT T5 LAMPS
FP54T5/841HO. LUMEN RATING = 4500 LMS.
Ballast/Driver: -

Summary

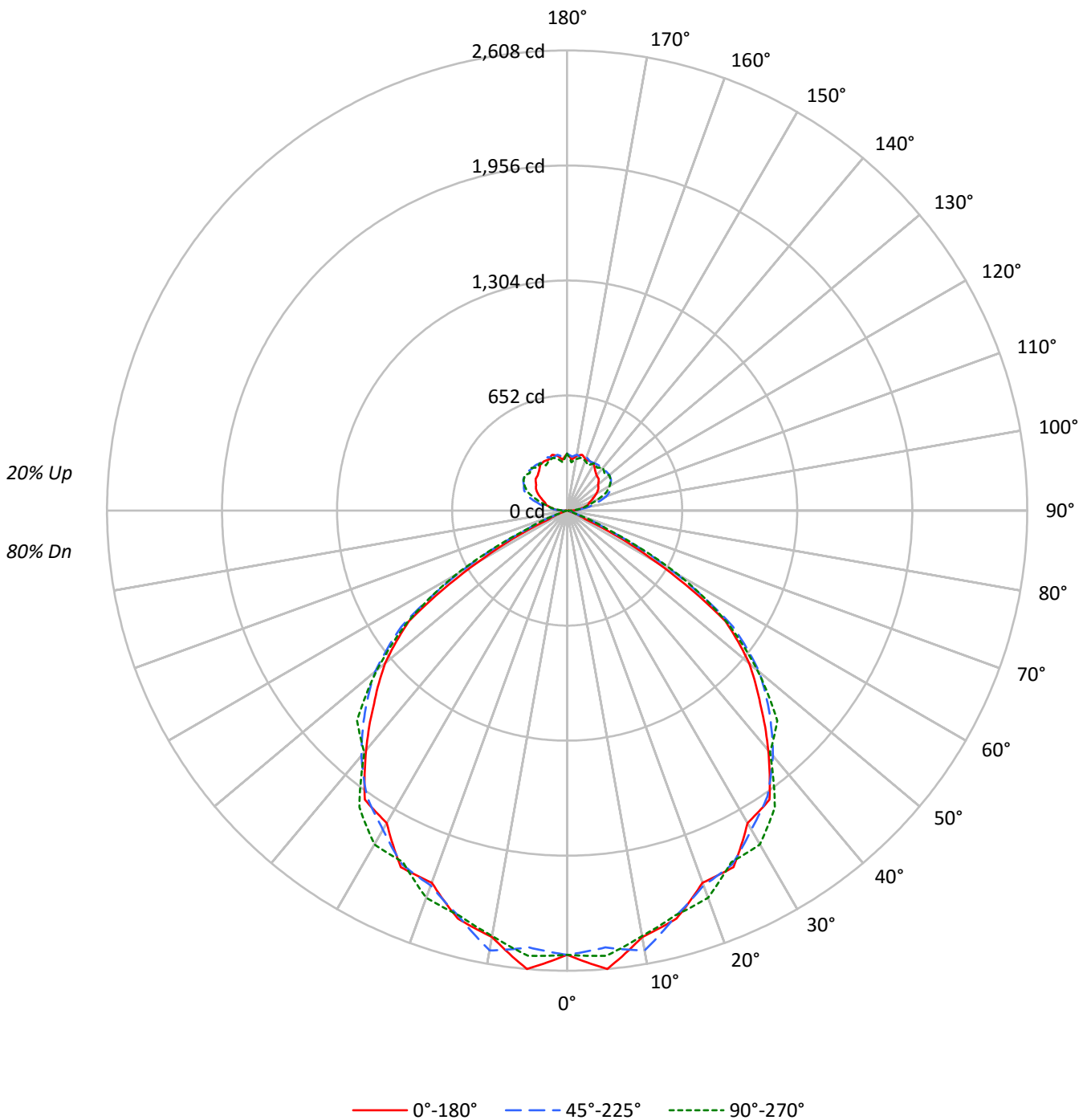
Lumens per Lamp: 4500 (3 lamps)
Luminaire Lumens: 7126.7 lumens
Efficiency: 52.8%
Efficacy: 40.3 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.35
Luminous Opening: Rectangular w/ Sides (W: 0.57' x L: 4.02' x H: 0.33')
CIE Type: Semi-Direct

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 | | | | 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 | 60 | 60 | 60 | 60 | 58 | 58 | 58 | 58 | 53 | 53 | 53 | 48 | 48 | 48 | 44 | 44 | 44 | 42 |
| 1 | 56 | 54 | 52 | 51 | 54 | 52 | 50 | 49 | 48 | 47 | 46 | 44 | 43 | 42 | 41 | 40 | 39 | 38 |
| 2 | 52 | 48 | 45 | 43 | 50 | 46 | 44 | 41 | 43 | 41 | 39 | 40 | 38 | 37 | 37 | 35 | 34 | 33 |
| 3 | 48 | 43 | 39 | 36 | 46 | 41 | 38 | 35 | 38 | 36 | 34 | 36 | 34 | 32 | 33 | 31 | 30 | 28 |
| 4 | 44 | 38 | 34 | 31 | 42 | 37 | 33 | 31 | 34 | 31 | 29 | 32 | 30 | 28 | 30 | 28 | 26 | 25 |
| 5 | 40 | 35 | 30 | 27 | 39 | 33 | 29 | 27 | 31 | 28 | 25 | 29 | 26 | 24 | 27 | 25 | 23 | 22 |
| 6 | 37 | 31 | 27 | 24 | 36 | 30 | 26 | 23 | 28 | 25 | 22 | 26 | 24 | 21 | 25 | 22 | 20 | 19 |
| 7 | 35 | 28 | 24 | 21 | 33 | 27 | 23 | 21 | 26 | 22 | 20 | 24 | 21 | 19 | 23 | 20 | 18 | 17 |
| 8 | 32 | 26 | 22 | 19 | 31 | 25 | 21 | 19 | 23 | 20 | 18 | 22 | 19 | 17 | 21 | 18 | 16 | 15 |
| 9 | 30 | 24 | 20 | 17 | 29 | 23 | 19 | 17 | 22 | 18 | 16 | 20 | 17 | 15 | 19 | 17 | 15 | 14 |
| 10 | 28 | 22 | 18 | 15 | 27 | 21 | 18 | 15 | 20 | 17 | 15 | 19 | 16 | 14 | 18 | 15 | 14 | 13 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|-------|-------|-------|
| 0° | 11739 | 11739 | 11739 |
| 5° | 12120 | 11177 | 11287 |
| 10° | 11452 | 11075 | 10521 |
| 15° | 11305 | 10206 | 9926 |
| 20° | 10810 | 9592 | 9578 |
| 25° | 11045 | 9353 | 8916 |
| 30° | 10509 | 8858 | 8825 |
| 35° | 10759 | 8489 | 8323 |
| 40° | 10087 | 7941 | 7337 |
| 45° | 9428 | 7294 | 7044 |
| 50° | 8892 | 6629 | 6057 |
| 55° | 7966 | 5598 | 4939 |
| 60° | 4765 | 3639 | 3436 |
| 65° | 1054 | 1369 | 1314 |
| 70° | 281 | 351 | 241 |
| 75° | 176 | 207 | 93 |
| 80° | 132 | 125 | 38 |
| 85° | 149 | 100 | 32 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture | % Lamp |
|-----------|--------|-----------|--------|
| 0°-10° | 239.3 | 3.4 | 1.8 |
| 10°-20° | 674.9 | 9.5 | 5.0 |
| 20°-30° | 1018.6 | 14.3 | 7.5 |
| 30°-40° | 1239.2 | 17.4 | 9.2 |
| 40°-50° | 1245.3 | 17.5 | 9.2 |
| 50°-60° | 969.0 | 13.6 | 7.2 |
| 60°-70° | 289.5 | 4.1 | 2.1 |
| 70°-80° | 29.1 | 0.4 | 0.2 |
| 80°-90° | 13.5 | 0.2 | 0.1 |
| 90°-100° | 74.3 | 1.0 | 0.6 |
| 100°-110° | 169.6 | 2.4 | 1.3 |
| 110°-120° | 234.5 | 3.3 | 1.7 |
| 120°-130° | 251.8 | 3.5 | 1.9 |
| 130°-140° | 228.4 | 3.2 | 1.7 |
| 140°-150° | 189.3 | 2.7 | 1.4 |
| 150°-160° | 141.8 | 2.0 | 1.1 |
| 160°-170° | 88.9 | 1.2 | 0.7 |
| 170°-180° | 29.7 | 0.4 | 0.2 |
| 0°-30° | 1932.8 | 27.1 | 14.3 |
| 0°-40° | 3171.9 | 44.5 | 23.5 |
| 0°-60° | 5386.3 | 75.6 | 39.9 |
| 0°-90° | 5718.4 | 80.2 | 42.4 |
| 90°-120° | 478.4 | 6.7 | 3.5 |
| 90°-150° | 1147.9 | 16.1 | 8.5 |
| 90°-180° | 1408.0 | 19.8 | 10.4 |
| 0°-180° | 7126.7 | 100.0 | 52.8 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|------|-------|------|-------|------|------|
| 0° | 2518 | 2518 | 2518 | 2518 | 2518 | |
| 5° | 2608 | 2513 | 2486 | 2507 | 2533 | 242 |
| 15° | 2394 | 2436 | 2378 | 2340 | 2374 | 670 |
| 25° | 2230 | 2176 | 2213 | 2212 | 2199 | 1010 |
| 35° | 2000 | 1951 | 1978 | 2032 | 2052 | 1225 |
| 45° | 1548 | 1621 | 1622 | 1623 | 1684 | 1200 |
| 55° | 1096 | 1140 | 1147 | 1111 | 1108 | 919 |
| 65° | 112 | 150 | 248 | 299 | 266 | 204 |
| 75° | 13 | 23 | 31 | 26 | 16 | 15 |
| 85° | 5 | 7 | 12 | 10 | 5 | 6 |
| 90° | 23 | 20 | 18 | 23 | 16 | 17 |
| 95° | 72 | 78 | 69 | 66 | 51 | 55 |
| 105° | 122 | 168 | 178 | 172 | 130 | 123 |
| 115° | 160 | 220 | 269 | 268 | 245 | 160 |
| 125° | 216 | 253 | 304 | 323 | 301 | 191 |
| 135° | 253 | 272 | 313 | 317 | 300 | 192 |
| 145° | 276 | 285 | 313 | 315 | 297 | 175 |
| 155° | 308 | 314 | 306 | 306 | 283 | 142 |
| 165° | 328 | 339 | 308 | 307 | 310 | 90 |
| 175° | 290 | 301 | 307 | 335 | 274 | 29 |
| 180° | 323 | 323 | 323 | 323 | 323 | |



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CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|------|--------|--------|--------|--------|--------|
| 0° | 2517.9 | 2517.9 | 2517.9 | 2517.9 | 2517.9 |
| 5° | 2608.3 | 2513.1 | 2485.5 | 2506.6 | 2533.3 |
| 10° | 2454.1 | 2512.5 | 2531.6 | 2458.4 | 2448.1 |
| 15° | 2393.9 | 2435.5 | 2378.5 | 2340.2 | 2374.1 |
| 20° | 2244.2 | 2326.6 | 2261.1 | 2309.2 | 2335.3 |
| 25° | 2229.6 | 2176.4 | 2213.2 | 2211.9 | 2198.9 |
| 30° | 2045.0 | 2075.9 | 2088.0 | 2180.4 | 2184.6 |
| 35° | 1999.6 | 1950.6 | 1978.1 | 2031.8 | 2052.5 |
| 40° | 1772.2 | 1798.9 | 1814.7 | 1813.0 | 1788.4 |
| 45° | 1547.9 | 1620.7 | 1621.7 | 1622.9 | 1684.0 |
| 50° | 1346.5 | 1406.0 | 1421.4 | 1422.9 | 1408.5 |
| 55° | 1095.5 | 1139.9 | 1146.9 | 1111.4 | 1107.8 |
| 60° | 584.1 | 671.6 | 705.2 | 705.5 | 736.3 |
| 65° | 112.4 | 150.1 | 248.1 | 299.2 | 266.4 |
| 70° | 25.3 | 41.0 | 58.7 | 67.4 | 45.6 |
| 75° | 12.8 | 22.9 | 31.4 | 26.2 | 16.3 |
| 80° | 7.2 | 11.9 | 17.0 | 14.0 | 6.0 |
| 85° | 5.4 | 7.1 | 11.8 | 10.2 | 4.6 |
| 90° | 23.1 | 19.7 | 18.4 | 22.6 | 16.2 |
| 95° | 71.5 | 77.8 | 68.8 | 65.8 | 50.8 |
| 100° | 87.1 | 129.9 | 127.7 | 116.2 | 92.1 |
| 105° | 122.4 | 168.2 | 177.8 | 171.5 | 130.0 |
| 110° | 134.7 | 206.9 | 235.8 | 215.7 | 185.8 |
| 115° | 160.2 | 220.3 | 269.3 | 268.5 | 244.7 |
| 120° | 191.7 | 231.4 | 282.3 | 297.1 | 277.7 |
| 125° | 216.0 | 253.0 | 303.8 | 323.2 | 301.2 |
| 130° | 229.3 | 264.6 | 312.8 | 324.0 | 311.5 |
| 135° | 253.0 | 272.2 | 313.2 | 317.1 | 299.7 |
| 140° | 259.5 | 283.0 | 309.6 | 309.0 | 315.3 |
| 145° | 276.3 | 285.3 | 313.3 | 315.4 | 296.6 |
| 150° | 302.5 | 308.1 | 309.6 | 310.7 | 309.1 |
| 155° | 308.3 | 314.4 | 306.5 | 305.9 | 283.3 |
| 160° | 306.6 | 306.4 | 321.9 | 290.8 | 300.0 |
| 165° | 327.6 | 338.8 | 308.5 | 307.2 | 309.6 |
| 170° | 314.9 | 304.1 | 321.2 | 320.5 | 296.2 |
| 175° | 289.5 | 300.9 | 306.7 | 334.6 | 274.1 |
| 180° | 323.0 | 323.0 | 323.0 | 323.0 | 323.0 |

(END OF REPORT)