

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: 89160

Luminaire Tested: **VB-SH-3T5-XUX-3 ALL LAMPS ON**

Issue Date: 3/3/2020

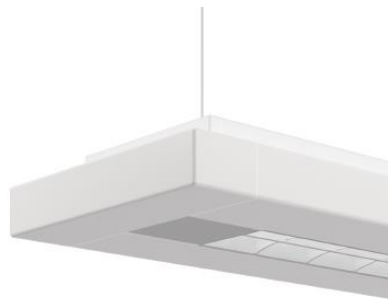
Test Information

Test Method: LM-41-14
Report Number: 89160
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: VB-SH-3T5-XUX-3 ALL LAMPS ON
Description: CORELITE VERTECHS SUSPENDED LUMINAIRE
WHITE INTERIOR WITH SPECULAR REFLECTORS AND 38 CELL HI PERFORMANCE LOUVER
BLADE
WITH DOWNLIGHT ISOLATORS
Light Source: 54 WATT T5 LAMPS
FP54T5/841HO. LUMEN RATING = 4500 LMS.
Ballast/Driver: -

Summary

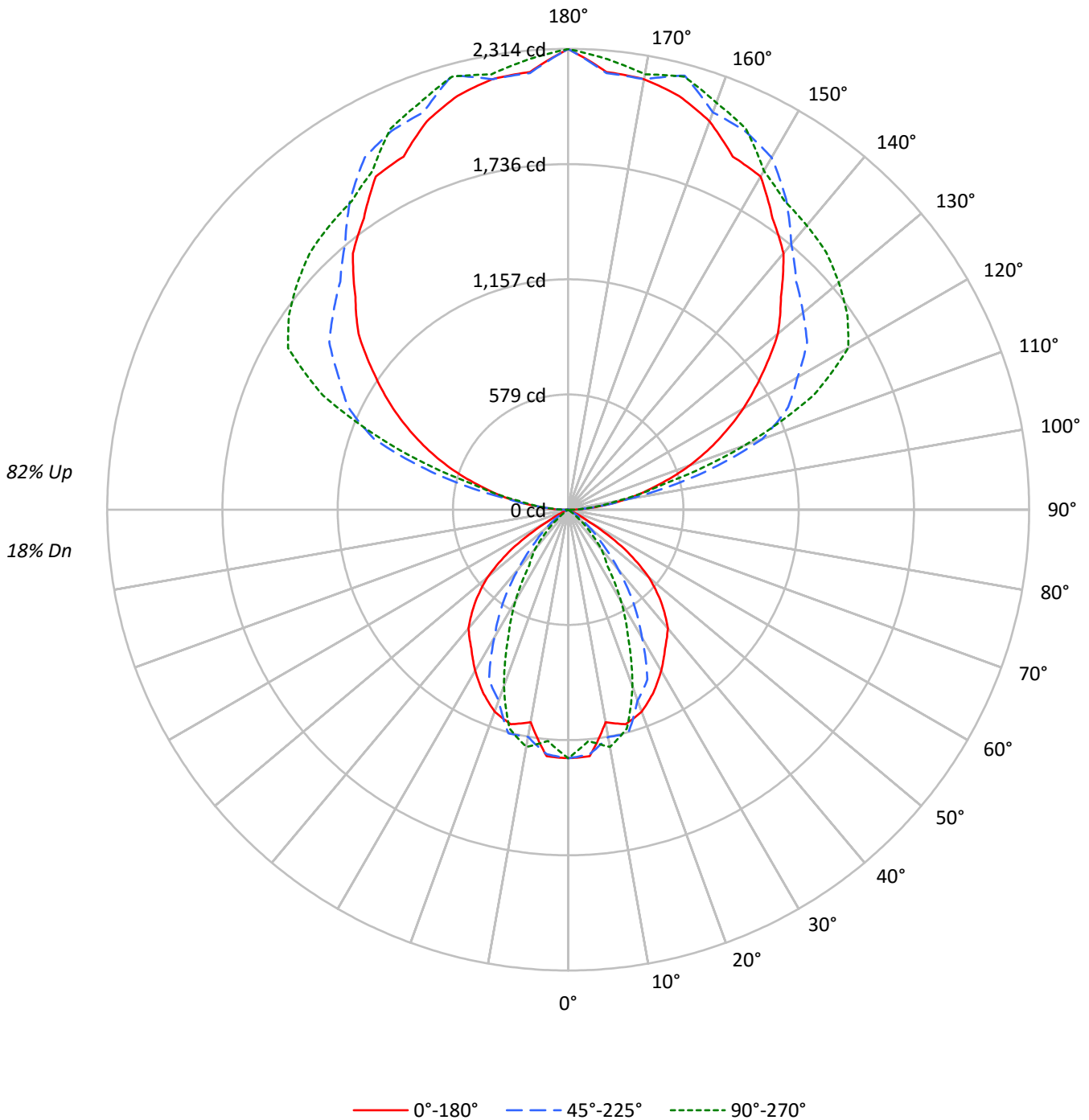
Lumens per Lamp: 4500 (3 lamps)
Luminaire Lumens: 9053.3 lumens
Efficiency: 67.1%
Efficacy: 51.1 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 0.85 / 0.98
Luminous Opening: Rectangular w/ Sides (W: 0.57' x L: 3.98' x H: 0.33')
CIE Type: Semi-Indirect

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



TEST NUMBER: 89160
CATALOG NUMBER: VB-SH-3T5-XUX-3 ALL LAMPS ON

Luminous Intensity Polar Plot





TEST NUMBER: 89160

CATALOG NUMBER: VB-SH-3T5-XUX-3 ALL LAMPS ON

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 | 67 | 67 | 67 | 67 | 59 | 59 | 59 | 59 | 44 | 44 | 44 | 30 | 30 | 30 | 18 | 18 | 18 | 12 |
| 1 | 61 | 59 | 56 | 54 | 54 | 52 | 50 | 48 | 39 | 38 | 37 | 27 | 27 | 26 | 16 | 16 | 16 | 11 |
| 2 | 56 | 52 | 48 | 45 | 49 | 46 | 43 | 40 | 35 | 33 | 31 | 24 | 23 | 22 | 15 | 14 | 14 | 10 |
| 3 | 51 | 46 | 41 | 38 | 45 | 41 | 37 | 34 | 31 | 29 | 27 | 22 | 21 | 19 | 14 | 13 | 12 | 9 |
| 4 | 47 | 41 | 36 | 32 | 42 | 36 | 32 | 29 | 28 | 25 | 23 | 20 | 18 | 17 | 13 | 12 | 11 | 8 |
| 5 | 43 | 36 | 31 | 28 | 38 | 32 | 28 | 25 | 25 | 22 | 20 | 18 | 16 | 15 | 11 | 11 | 10 | 7 |
| 6 | 40 | 33 | 28 | 24 | 35 | 29 | 25 | 22 | 23 | 20 | 18 | 16 | 15 | 13 | 11 | 10 | 9 | 7 |
| 7 | 37 | 30 | 25 | 21 | 33 | 26 | 22 | 19 | 21 | 18 | 16 | 15 | 13 | 12 | 10 | 9 | 8 | 6 |
| 8 | 34 | 27 | 22 | 19 | 30 | 24 | 20 | 17 | 19 | 16 | 14 | 14 | 12 | 11 | 9 | 8 | 7 | 6 |
| 9 | 32 | 24 | 20 | 17 | 28 | 22 | 18 | 15 | 17 | 14 | 12 | 13 | 11 | 10 | 8 | 7 | 7 | 5 |
| 10 | 30 | 22 | 18 | 15 | 26 | 20 | 16 | 14 | 16 | 13 | 11 | 12 | 10 | 9 | 8 | 7 | 6 | 5 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|------|------|------|
| 0° | 5870 | 5870 | 5870 |
| 5° | 5826 | 5593 | 5241 |
| 10° | 5100 | 5113 | 5243 |
| 15° | 5312 | 5033 | 4800 |
| 20° | 5242 | 4361 | 3904 |
| 25° | 5059 | 4012 | 2919 |
| 30° | 4837 | 3171 | 2169 |
| 35° | 4603 | 2470 | 1390 |
| 40° | 4466 | 1730 | 1071 |
| 45° | 4070 | 1095 | 628 |
| 50° | 3523 | 669 | 253 |
| 55° | 2546 | 342 | 42 |
| 60° | 993 | 119 | 8 |
| 65° | 234 | 28 | 3 |
| 70° | 86 | 17 | 1 |
| 75° | 43 | 14 | 1 |
| 80° | 31 | 8 | 1 |
| 85° | 14 | 4 | 0 |



TEST NUMBER: 89160

CATALOG NUMBER: VB-SH-3T5-XUX-3 ALL LAMPS ON

ZONAL LUMENS:

| Zone | Lumens | % Fixture | % Lamp |
|-----------|--------|-----------|--------|
| 0°-10° | 112.7 | 1.2 | 0.8 |
| 10°-20° | 316.6 | 3.5 | 2.3 |
| 20°-30° | 413.0 | 4.6 | 3.1 |
| 30°-40° | 377.8 | 4.2 | 2.8 |
| 40°-50° | 259.2 | 2.9 | 1.9 |
| 50°-60° | 108.5 | 1.2 | 0.8 |
| 60°-70° | 14.8 | 0.2 | 0.1 |
| 70°-80° | 2.2 | 0.0 | 0.0 |
| 80°-90° | 3.6 | 0.0 | 0.0 |
| 90°-100° | 151.5 | 1.7 | 1.1 |
| 100°-110° | 624.5 | 6.9 | 4.6 |
| 110°-120° | 1123.2 | 12.4 | 8.3 |
| 120°-130° | 1300.4 | 14.4 | 9.6 |
| 130°-140° | 1286.3 | 14.2 | 9.5 |
| 140°-150° | 1171.5 | 12.9 | 8.7 |
| 150°-160° | 957.5 | 10.6 | 7.1 |
| 160°-170° | 618.6 | 6.8 | 4.6 |
| 170°-180° | 211.4 | 2.3 | 1.6 |
| 0°-30° | 842.3 | 9.3 | 6.2 |
| 0°-40° | 1220.2 | 13.5 | 9.0 |
| 0°-60° | 1587.9 | 17.5 | 11.8 |
| 0°-90° | 1608.5 | 17.8 | 11.9 |
| 90°-120° | 1899.2 | 21.0 | 14.1 |
| 90°-150° | 5657.4 | 62.5 | 41.9 |
| 90°-180° | 7445.0 | 82.2 | 55.1 |
| 0°-180° | 9053.3 | 100.0 | 67.1 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|------|-------|------|-------|------|------|
| 0° | 1248 | 1248 | 1248 | 1248 | 1248 | |
| 5° | 1243 | 1129 | 1233 | 1183 | 1166 | 113 |
| 15° | 1115 | 1185 | 1163 | 1129 | 1138 | 311 |
| 25° | 1012 | 1049 | 941 | 765 | 713 | 466 |
| 35° | 848 | 850 | 571 | 391 | 340 | 534 |
| 45° | 663 | 507 | 241 | 173 | 149 | 508 |
| 55° | 347 | 194 | 69 | 22 | 9 | 299 |
| 65° | 25 | 16 | 5 | 1 | 1 | 44 |
| 75° | 3 | 4 | 2 | 0 | 0 | 4 |
| 85° | 0 | 1 | 0 | 0 | 0 | 1 |
| 90° | 9 | 12 | 11 | 11 | 12 | 19 |
| 95° | 122 | 142 | 108 | 101 | 105 | 144 |
| 105° | 454 | 627 | 676 | 529 | 495 | 486 |
| 115° | 832 | 942 | 1218 | 1359 | 1358 | 823 |
| 125° | 1188 | 1269 | 1464 | 1631 | 1710 | 1066 |
| 135° | 1510 | 1619 | 1619 | 1735 | 1831 | 1174 |
| 145° | 1788 | 1834 | 1906 | 1873 | 1893 | 1126 |
| 155° | 1956 | 2054 | 2098 | 2154 | 2111 | 915 |
| 165° | 2151 | 2152 | 2257 | 2177 | 2251 | 606 |
| 175° | 2207 | 2166 | 2200 | 2117 | 2270 | 211 |
| 180° | 2314 | 2314 | 2314 | 2314 | 2314 | |



TEST NUMBER: 89160

CATALOG NUMBER: VB-SH-3T5-XUX-3 ALL LAMPS ON

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|------|--------|--------|--------|--------|--------|
| 0° | 1247.8 | 1247.8 | 1247.8 | 1247.8 | 1247.8 |
| 5° | 1242.7 | 1128.7 | 1232.7 | 1182.6 | 1165.8 |
| 10° | 1083.3 | 1154.4 | 1158.5 | 1142.1 | 1209.1 |
| 15° | 1115.1 | 1184.7 | 1162.6 | 1129.2 | 1137.8 |
| 20° | 1078.8 | 1112.9 | 1019.1 | 995.2 | 943.4 |
| 25° | 1012.5 | 1048.6 | 941.0 | 764.9 | 713.4 |
| 30° | 933.3 | 959.4 | 741.0 | 576.3 | 532.1 |
| 35° | 848.2 | 849.5 | 570.6 | 391.1 | 339.7 |
| 40° | 778.0 | 699.0 | 392.0 | 264.7 | 258.7 |
| 45° | 662.7 | 507.3 | 241.4 | 172.6 | 148.9 |
| 50° | 529.2 | 354.4 | 142.2 | 80.8 | 58.2 |
| 55° | 347.3 | 194.4 | 69.4 | 21.5 | 9.4 |
| 60° | 120.8 | 72.1 | 22.8 | 3.0 | 1.6 |
| 65° | 24.8 | 15.7 | 5.1 | 1.0 | 0.6 |
| 70° | 7.7 | 6.3 | 2.9 | 0.7 | 0.2 |
| 75° | 3.1 | 3.5 | 2.1 | 0.2 | 0.1 |
| 80° | 1.7 | 2.0 | 1.1 | 0.2 | 0.1 |
| 85° | 0.5 | 1.1 | 0.5 | 0.0 | 0.0 |
| 90° | 8.9 | 11.7 | 10.9 | 11.1 | 11.9 |
| 95° | 121.9 | 142.2 | 107.5 | 101.4 | 105.4 |
| 100° | 287.4 | 409.0 | 302.2 | 272.1 | 250.0 |
| 105° | 453.5 | 626.9 | 676.1 | 529.0 | 494.7 |
| 110° | 647.3 | 796.2 | 1036.4 | 982.3 | 940.1 |
| 115° | 831.9 | 941.6 | 1218.4 | 1359.4 | 1357.8 |
| 120° | 1013.7 | 1133.6 | 1329.2 | 1521.1 | 1623.1 |
| 125° | 1188.2 | 1268.7 | 1463.7 | 1631.1 | 1710.0 |
| 130° | 1374.3 | 1450.7 | 1538.9 | 1730.0 | 1773.3 |
| 135° | 1510.3 | 1618.9 | 1618.6 | 1735.1 | 1830.7 |
| 140° | 1681.2 | 1742.7 | 1742.3 | 1770.1 | 1863.1 |
| 145° | 1787.6 | 1834.3 | 1905.8 | 1872.6 | 1892.6 |
| 150° | 1932.0 | 1971.1 | 2042.0 | 2002.9 | 1964.6 |
| 155° | 1956.2 | 2054.0 | 2098.1 | 2154.1 | 2110.6 |
| 160° | 2075.0 | 2119.3 | 2123.2 | 2136.8 | 2175.2 |
| 165° | 2151.3 | 2151.5 | 2257.0 | 2176.8 | 2251.2 |
| 170° | 2195.0 | 2238.6 | 2194.3 | 2265.0 | 2220.0 |
| 175° | 2206.6 | 2165.7 | 2200.5 | 2116.8 | 2270.4 |
| 180° | 2313.5 | 2313.5 | 2313.5 | 2313.5 | 2313.5 |

(END OF REPORT)