

Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: CORELITE

Report Number: P565130

Luminaire Tested: **SQ4-PW1-150U-075D-840-1D-UNV-STD-W-4**

Issue Date: 7/30/2021

Test Information

Test Method: LM-79-2019
Report Number: P565130
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-25, G2-2106-289-3)
Test Lab: INNOVATION CENTER
Issue Date: 7/30/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-PW1-150U-075D-840-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE WAVES CONTINUOUS LENS.
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

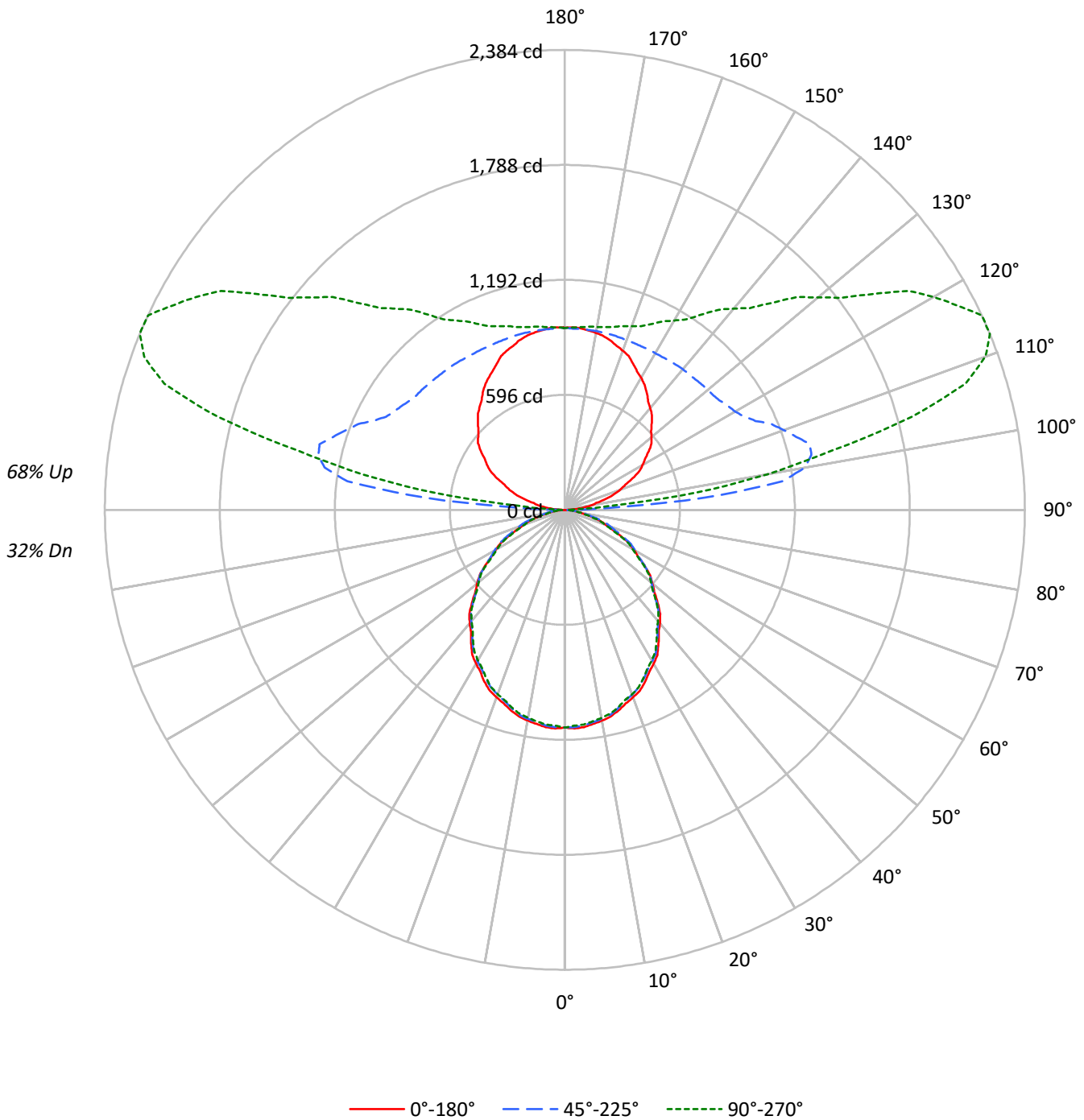
Lumens per Lamp: N/A
Luminaire Lumens: 8956.8 lumens
Efficiency: N/A
Efficacy: 141.1 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.19 / 1.31
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 63.5
Input Voltage (V): 120
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: 24 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 | 103 | 103 | 103 | 103 | 93 | 93 | 93 | 93 | 73 | 73 | 73 | 56 | 56 | 56 | 40 | 40 | 40 | 32 |
| 1 | 94 | 90 | 86 | 83 | 84 | 81 | 78 | 75 | 64 | 62 | 60 | 49 | 48 | 46 | 35 | 34 | 34 | 27 |
| 2 | 85 | 78 | 72 | 67 | 77 | 71 | 66 | 61 | 56 | 53 | 50 | 43 | 41 | 39 | 31 | 30 | 28 | 23 |
| 3 | 78 | 69 | 62 | 56 | 70 | 62 | 56 | 51 | 50 | 45 | 42 | 38 | 35 | 33 | 27 | 26 | 24 | 19 |
| 4 | 71 | 61 | 53 | 47 | 64 | 55 | 48 | 43 | 44 | 39 | 36 | 34 | 31 | 28 | 25 | 22 | 21 | 17 |
| 5 | 65 | 54 | 46 | 40 | 59 | 49 | 42 | 37 | 39 | 34 | 31 | 30 | 27 | 24 | 22 | 20 | 18 | 14 |
| 6 | 60 | 48 | 41 | 35 | 54 | 44 | 37 | 32 | 35 | 30 | 27 | 27 | 24 | 21 | 20 | 18 | 16 | 13 |
| 7 | 55 | 44 | 36 | 30 | 50 | 40 | 33 | 28 | 32 | 27 | 23 | 25 | 21 | 19 | 18 | 16 | 14 | 11 |
| 8 | 51 | 39 | 32 | 27 | 46 | 36 | 29 | 25 | 29 | 24 | 21 | 23 | 19 | 17 | 17 | 14 | 13 | 10 |
| 9 | 48 | 36 | 29 | 24 | 43 | 33 | 26 | 22 | 27 | 22 | 18 | 21 | 17 | 15 | 15 | 13 | 11 | 9 |
| 10 | 44 | 33 | 26 | 21 | 40 | 30 | 24 | 20 | 24 | 20 | 16 | 19 | 16 | 13 | 14 | 12 | 10 | 8 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|-------|-------|-------|
| 0° | 10409 | 10409 | 10409 |
| 5° | 10476 | 10393 | 10347 |
| 10° | 10393 | 10308 | 10253 |
| 15° | 10282 | 10168 | 10130 |
| 20° | 10159 | 10003 | 9983 |
| 25° | 10017 | 9835 | 9805 |
| 30° | 9805 | 9657 | 9593 |
| 35° | 9527 | 9392 | 9337 |
| 40° | 9229 | 9086 | 9050 |
| 45° | 8871 | 8754 | 8715 |
| 50° | 8503 | 8431 | 8375 |
| 55° | 8105 | 8105 | 7978 |
| 60° | 7612 | 7757 | 7482 |
| 65° | 6966 | 7313 | 6792 |
| 70° | 6140 | 6730 | 5980 |
| 75° | 5244 | 6024 | 5101 |
| 80° | 4065 | 5069 | 4118 |
| 85° | 2625 | 3896 | 3472 |



TEST NUMBER: P565130

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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 106.2 | 1.2 |
| 10°-20° | 299.9 | 3.3 |
| 20°-30° | 444.9 | 5.0 |
| 30°-40° | 520.6 | 5.8 |
| 40°-50° | 518.2 | 5.8 |
| 50°-60° | 447.5 | 5.0 |
| 60°-70° | 322.1 | 3.6 |
| 70°-80° | 168.9 | 1.9 |
| 80°-90° | 43.8 | 0.5 |
| 90°-100° | 438.6 | 4.9 |
| 100°-110° | 1185.8 | 13.2 |
| 110°-120° | 1246.8 | 13.9 |
| 120°-130° | 1012.7 | 11.3 |
| 130°-140° | 794.4 | 8.9 |
| 140°-150° | 609.7 | 6.8 |
| 150°-160° | 438.5 | 4.9 |
| 160°-170° | 267.9 | 3.0 |
| 170°-180° | 90.3 | 1.0 |
| 0°-30° | 851.0 | 9.5 |
| 0°-40° | 1371.6 | 15.3 |
| 0°-60° | 2337.3 | 26.1 |
| 0°-90° | 2872.2 | 32.1 |
| 90°-120° | 2871.2 | 32.1 |
| 90°-150° | 5287.9 | 59.0 |
| 90°-180° | 6085.0 | 67.9 |
| 0°-180° | 8956.8 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|------|-------|------|-------|------|------|
| 0° | 1128 | 1128 | 1128 | 1128 | 1128 | |
| 5° | 1131 | 1118 | 1122 | 1119 | 1117 | 107 |
| 15° | 1076 | 1063 | 1064 | 1062 | 1061 | 303 |
| 25° | 984 | 968 | 966 | 960 | 963 | 452 |
| 35° | 846 | 834 | 834 | 826 | 829 | 529 |
| 45° | 680 | 674 | 671 | 669 | 668 | 525 |
| 55° | 504 | 503 | 504 | 497 | 496 | 450 |
| 65° | 319 | 329 | 335 | 322 | 311 | 316 |
| 75° | 147 | 161 | 169 | 158 | 143 | 158 |
| 85° | 25 | 33 | 37 | 35 | 33 | 33 |
| 90° | 2 | 6 | 13 | 14 | 13 | 5 |
| 95° | 68 | 239 | 729 | 378 | 224 | 71 |
| 105° | 220 | 341 | 1316 | 1940 | 1861 | 232 |
| 115° | 388 | 474 | 1091 | 2112 | 2384 | 383 |
| 125° | 531 | 609 | 983 | 1659 | 1949 | 474 |
| 135° | 637 | 712 | 957 | 1340 | 1517 | 492 |
| 145° | 741 | 796 | 944 | 1147 | 1234 | 463 |
| 155° | 836 | 869 | 936 | 1029 | 1063 | 386 |
| 165° | 910 | 919 | 940 | 976 | 981 | 256 |
| 175° | 945 | 944 | 941 | 953 | 951 | 90 |
| 180° | 944 | 944 | 944 | 944 | 944 | |



TEST NUMBER: P565130

CATALOG NUMBER: SQ4-PW1-150U-075D-840-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|--------|--------|--------|--------|--------|
| 0° | 1128.2 | 1128.2 | 1128.2 | 1128.2 | 1128.2 |
| 2.5° | 1134.5 | 1125.2 | 1128.2 | 1125.6 | 1120.2 |
| 5° | 1131.1 | 1118.5 | 1122.2 | 1119.2 | 1117.2 |
| 7.5° | 1119.6 | 1107.9 | 1110.7 | 1107.4 | 1106.3 |
| 10° | 1109.3 | 1097.6 | 1100.3 | 1096.3 | 1094.4 |
| 12.5° | 1097.3 | 1084.9 | 1087.6 | 1083.6 | 1082.4 |
| 15° | 1076.5 | 1062.9 | 1064.5 | 1062.5 | 1060.6 |
| 17.5° | 1052.2 | 1038.4 | 1038.7 | 1035.5 | 1035.1 |
| 20° | 1034.7 | 1020.1 | 1018.8 | 1014.9 | 1016.8 |
| 22.5° | 1015.6 | 1000.3 | 998.9 | 993.4 | 996.2 |
| 25° | 984.0 | 967.5 | 966.1 | 960.2 | 963.2 |
| 27.5° | 947.4 | 931.1 | 931.1 | 922.9 | 926.0 |
| 30° | 920.4 | 904.9 | 906.5 | 896.6 | 900.5 |
| 32.5° | 891.8 | 877.8 | 878.7 | 868.8 | 872.7 |
| 35° | 845.9 | 834.2 | 833.9 | 826.1 | 829.0 |
| 37.5° | 798.9 | 788.6 | 787.0 | 782.5 | 783.2 |
| 40° | 766.3 | 757.6 | 754.4 | 751.4 | 751.4 |
| 42.5° | 732.2 | 724.2 | 721.0 | 718.8 | 718.0 |
| 45° | 679.9 | 674.0 | 670.9 | 668.9 | 667.9 |
| 47.5° | 628.2 | 622.7 | 620.0 | 618.6 | 617.6 |
| 50° | 592.4 | 588.5 | 587.4 | 584.4 | 583.5 |
| 52.5° | 556.6 | 554.3 | 553.2 | 549.4 | 548.5 |
| 55° | 503.9 | 503.0 | 503.9 | 497.0 | 496.0 |
| 57.5° | 449.1 | 450.6 | 453.8 | 444.4 | 442.1 |
| 60° | 412.5 | 416.4 | 420.4 | 409.4 | 405.5 |
| 62.5° | 375.1 | 381.3 | 387.1 | 374.4 | 369.0 |
| 65° | 319.1 | 328.8 | 335.0 | 321.8 | 311.1 |
| 67.5° | 265.0 | 277.0 | 284.5 | 270.3 | 258.2 |
| 70° | 227.6 | 241.2 | 249.5 | 235.3 | 221.7 |
| 72.5° | 195.0 | 210.2 | 216.9 | 203.5 | 189.8 |
| 75° | 147.1 | 160.7 | 169.0 | 157.7 | 143.1 |
| 77.5° | 104.4 | 117.2 | 124.0 | 114.2 | 102.2 |
| 80° | 76.5 | 90.1 | 95.4 | 87.2 | 77.5 |
| 82.5° | 54.3 | 65.5 | 69.2 | 64.3 | 57.6 |
| 85° | 24.8 | 32.6 | 36.8 | 34.7 | 32.8 |
| 87.5° | 6.8 | 13.0 | 17.7 | 18.0 | 18.5 |
| 90° | 2.0 | 6.0 | 13.2 | 14.2 | 13.2 |
| 92.5° | 28.9 | 105.1 | 207.4 | 90.0 | 65.2 |
| 95° | 68.1 | 238.9 | 729.4 | 377.5 | 224.5 |
| 97.5° | 109.3 | 274.0 | 1136.9 | 940.9 | 691.0 |
| 100° | 140.2 | 288.2 | 1263.7 | 1317.9 | 1065.6 |
| 102.5° | 168.6 | 307.9 | 1308.4 | 1603.8 | 1415.1 |
| 105° | 220.4 | 340.6 | 1315.5 | 1940.5 | 1861.0 |
| 107.5° | 268.4 | 378.0 | 1258.0 | 2150.6 | 2177.0 |
| 110° | 305.8 | 405.1 | 1206.8 | 2207.0 | 2319.2 |

TEST NUMBER: P565130

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CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|-------|-------|--------|--------|--------|
| 112.5° | 339.1 | 432.1 | 1159.7 | 2195.7 | 2384.2 |
| 115° | 388.1 | 474.5 | 1091.0 | 2112.1 | 2384.2 |
| 117.5° | 436.0 | 517.1 | 1045.7 | 1984.3 | 2292.8 |
| 120° | 465.3 | 544.7 | 1018.9 | 1892.6 | 2207.5 |
| 122.5° | 492.9 | 570.8 | 1002.6 | 1794.3 | 2111.6 |
| 125° | 531.3 | 608.8 | 983.3 | 1659.4 | 1949.4 |
| 127.5° | 566.6 | 642.7 | 972.0 | 1549.3 | 1804.4 |
| 130° | 586.1 | 664.6 | 967.1 | 1481.3 | 1711.7 |
| 132.5° | 606.5 | 684.1 | 962.2 | 1419.9 | 1632.1 |
| 135° | 636.9 | 712.4 | 956.9 | 1339.9 | 1516.7 |
| 137.5° | 667.6 | 738.9 | 952.5 | 1274.9 | 1418.9 |
| 140° | 688.7 | 755.3 | 950.8 | 1233.1 | 1361.2 |
| 142.5° | 709.1 | 771.6 | 947.6 | 1195.4 | 1307.6 |
| 145° | 740.6 | 796.2 | 943.7 | 1146.9 | 1234.3 |
| 147.5° | 769.2 | 818.5 | 939.3 | 1102.9 | 1170.1 |
| 150° | 790.3 | 834.0 | 937.6 | 1079.0 | 1132.7 |
| 152.5° | 809.8 | 848.0 | 936.8 | 1056.9 | 1101.0 |
| 155° | 836.0 | 868.8 | 935.6 | 1028.8 | 1062.6 |
| 157.5° | 863.3 | 886.1 | 935.8 | 1009.2 | 1031.5 |
| 160° | 878.7 | 897.6 | 936.6 | 996.9 | 1012.8 |
| 162.5° | 890.9 | 906.6 | 937.4 | 987.1 | 999.0 |
| 165° | 910.2 | 919.1 | 939.7 | 976.3 | 981.3 |
| 167.5° | 923.4 | 929.6 | 939.9 | 967.1 | 969.5 |
| 170° | 931.5 | 934.5 | 940.7 | 963.0 | 963.0 |
| 172.5° | 938.0 | 938.6 | 940.7 | 958.1 | 957.3 |
| 175° | 944.7 | 943.8 | 940.7 | 952.8 | 950.8 |
| 177.5° | 947.0 | 944.6 | 940.5 | 948.6 | 946.2 |
| 180° | 943.7 | 943.7 | 943.7 | 943.7 | 943.7 |

(END OF REPORT)