

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: P518343

Luminaire Tested: **SQ4-BB-025U-075D-940-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518343
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-32, G2-2009-966-12)
Test Lab: INNOVATION CENTER
Issue Date: 4/29/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-BB-025U-075D-940-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 250 LUMENS PER FOOT
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

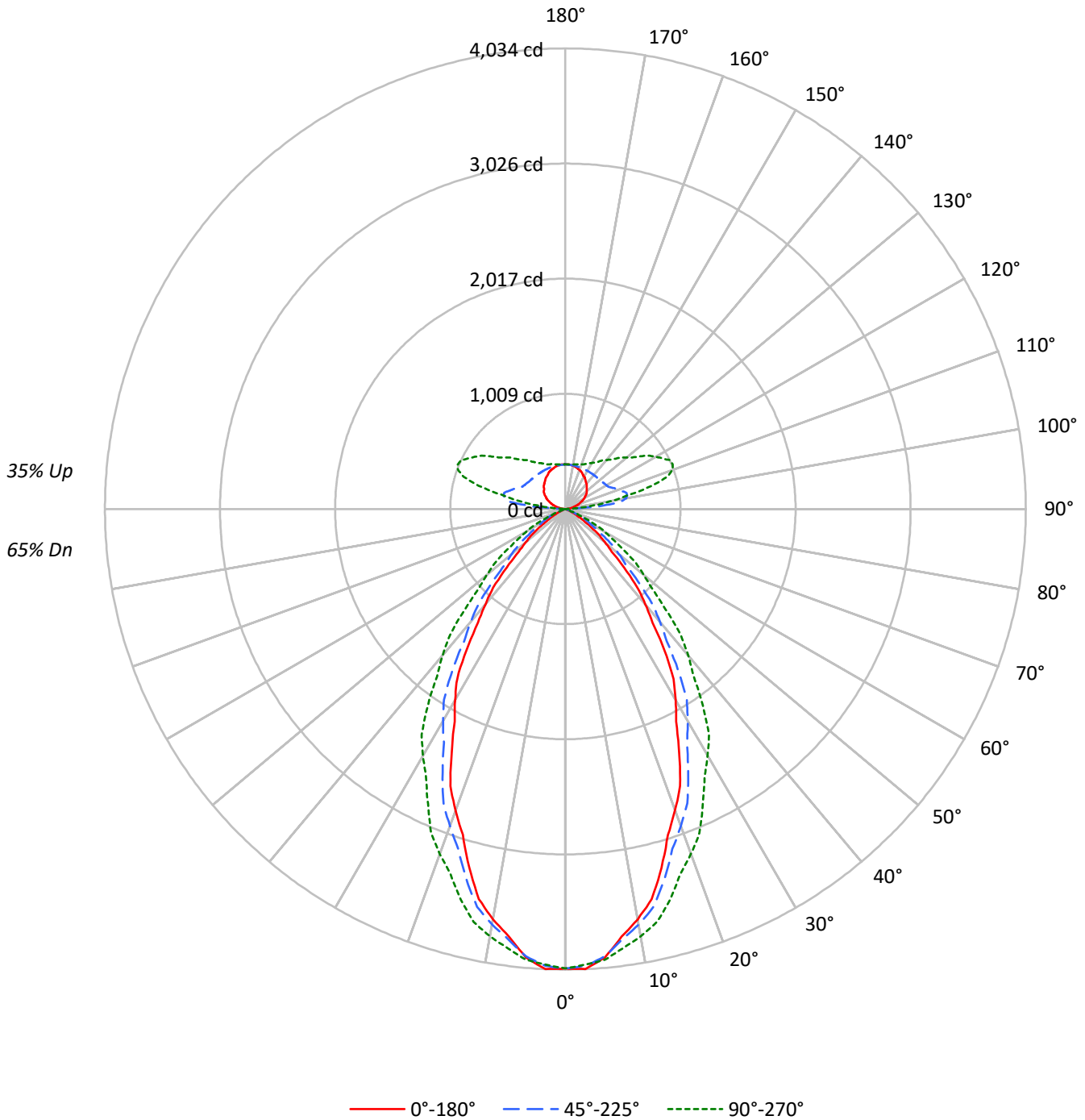
Lumens per Lamp: N/A
Luminaire Lumens: 7333.2 lumens
Efficiency: N/A
Efficacy: 77.4 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 94.8
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





TEST NUMBER: P518343

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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 | 50 | 30 | 10 | 0 | |
| RCR | | | | | | | | | | | | | | | | | | | | | | |
| 0 | 111 | 111 | 111 | 111 | 104 | 104 | 104 | 104 | 92 | 92 | 92 | 81 | 81 | 81 | 70 | 70 | 70 | 65 | | | | |
| 1 | 104 | 100 | 97 | 94 | 97 | 95 | 92 | 89 | 84 | 82 | 80 | 75 | 73 | 72 | 66 | 65 | 64 | 60 | | | | |
| 2 | 96 | 90 | 85 | 81 | 91 | 85 | 81 | 77 | 77 | 73 | 70 | 68 | 66 | 64 | 61 | 59 | 58 | 54 | | | | |
| 3 | 90 | 82 | 75 | 70 | 84 | 77 | 72 | 68 | 70 | 66 | 62 | 63 | 60 | 57 | 56 | 54 | 52 | 49 | | | | |
| 4 | 83 | 74 | 67 | 62 | 79 | 70 | 64 | 60 | 64 | 59 | 55 | 58 | 54 | 51 | 52 | 49 | 47 | 44 | | | | |
| 5 | 78 | 67 | 60 | 55 | 73 | 64 | 58 | 53 | 59 | 54 | 50 | 53 | 49 | 46 | 48 | 45 | 43 | 40 | | | | |
| 6 | 72 | 62 | 55 | 49 | 68 | 59 | 53 | 48 | 54 | 49 | 45 | 49 | 45 | 42 | 45 | 41 | 39 | 37 | | | | |
| 7 | 68 | 57 | 50 | 45 | 64 | 54 | 48 | 43 | 50 | 45 | 41 | 46 | 41 | 38 | 42 | 38 | 36 | 34 | | | | |
| 8 | 63 | 52 | 45 | 41 | 60 | 50 | 44 | 39 | 46 | 41 | 37 | 42 | 38 | 35 | 39 | 35 | 33 | 31 | | | | |
| 9 | 60 | 48 | 42 | 37 | 57 | 47 | 40 | 36 | 43 | 38 | 34 | 40 | 35 | 32 | 36 | 33 | 30 | 29 | | | | |
| 10 | 56 | 45 | 38 | 34 | 53 | 43 | 37 | 33 | 40 | 35 | 32 | 37 | 33 | 30 | 34 | 31 | 28 | 27 | | | | |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|-------|-------|-------|
| 0° | 12377 | 12377 | 12377 |
| 5° | 12178 | 12148 | 12238 |
| 10° | 11394 | 11546 | 11869 |
| 15° | 10359 | 10687 | 11282 |
| 20° | 9195 | 9673 | 10520 |
| 25° | 8008 | 8642 | 9666 |
| 30° | 6859 | 7613 | 8857 |
| 35° | 5687 | 6462 | 7880 |
| 40° | 4370 | 5167 | 6715 |
| 45° | 3158 | 3912 | 5403 |
| 50° | 2152 | 2916 | 4285 |
| 55° | 1399 | 2109 | 3330 |
| 60° | 803 | 1485 | 2407 |
| 65° | 212 | 907 | 1218 |
| 70° | 105 | 281 | 350 |
| 75° | 46 | 23 | 0 |
| 80° | 34 | 0 | 0 |
| 85° | 0 | 0 | 0 |



TEST NUMBER: P518343

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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 367.3 | 5.0 |
| 10°-20° | 939.3 | 12.8 |
| 20°-30° | 1175.8 | 16.0 |
| 30°-40° | 1086.1 | 14.8 |
| 40°-50° | 729.8 | 10.0 |
| 50°-60° | 377.0 | 5.1 |
| 60°-70° | 118.1 | 1.6 |
| 70°-80° | 7.5 | 0.1 |
| 80°-90° | 2.2 | 0.0 |
| 90°-100° | 190.3 | 2.6 |
| 100°-110° | 500.2 | 6.8 |
| 110°-120° | 518.7 | 7.1 |
| 120°-130° | 416.0 | 5.7 |
| 130°-140° | 326.4 | 4.5 |
| 140°-150° | 250.5 | 3.4 |
| 150°-160° | 180.4 | 2.5 |
| 160°-170° | 110.4 | 1.5 |
| 170°-180° | 37.3 | 0.5 |
| 0°-30° | 2482.4 | 33.9 |
| 0°-40° | 3568.5 | 48.7 |
| 0°-60° | 4675.2 | 63.8 |
| 0°-90° | 4803.0 | 65.5 |
| 90°-120° | 1209.1 | 16.5 |
| 90°-150° | 2202.1 | 30.0 |
| 90°-180° | 2530.0 | 34.5 |
| 0°-180° | 7333.2 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|------|-------|------|-------|------|------|
| 0° | 4024 | 4024 | 4024 | 4024 | 4024 | |
| 5° | 3945 | 3905 | 3935 | 3949 | 3964 | 366 |
| 15° | 3254 | 3242 | 3357 | 3469 | 3544 | 906 |
| 25° | 2360 | 2379 | 2547 | 2721 | 2848 | 1082 |
| 35° | 1515 | 1553 | 1721 | 1924 | 2099 | 938 |
| 45° | 726 | 770 | 900 | 1075 | 1242 | 570 |
| 55° | 261 | 305 | 393 | 505 | 621 | 243 |
| 65° | 29 | 56 | 125 | 150 | 167 | 49 |
| 75° | 4 | 4 | 2 | 0 | 0 | 6 |
| 85° | 0 | 0 | 0 | 0 | 0 | 0 |
| 90° | 2 | 7 | 20 | 10 | 10 | 2 |
| 95° | 25 | 98 | 328 | 169 | 115 | 28 |
| 105° | 90 | 137 | 553 | 840 | 783 | 95 |
| 115° | 160 | 194 | 443 | 884 | 1008 | 158 |
| 125° | 223 | 250 | 403 | 681 | 803 | 198 |
| 135° | 265 | 292 | 390 | 550 | 623 | 205 |
| 145° | 308 | 327 | 385 | 469 | 506 | 193 |
| 155° | 348 | 358 | 385 | 423 | 435 | 160 |
| 165° | 375 | 380 | 385 | 400 | 405 | 106 |
| 175° | 390 | 390 | 388 | 393 | 393 | 37 |
| 180° | 390 | 390 | 390 | 390 | 390 | |



TEST NUMBER: P518343

CATALOG NUMBER: SQ4-BB-025U-075D-940-1D-UNV-STD-W-12

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|--------|--------|--------|--------|--------|
| 0° | 4024.5 | 4024.5 | 4024.5 | 4024.5 | 4024.5 |
| 2.5° | 4033.9 | 3995.8 | 4005.8 | 4005.6 | 3994.9 |
| 5° | 3944.7 | 3904.7 | 3935.0 | 3948.9 | 3964.2 |
| 7.5° | 3778.0 | 3746.8 | 3804.9 | 3848.4 | 3880.0 |
| 10° | 3648.7 | 3622.1 | 3697.4 | 3756.8 | 3800.6 |
| 12.5° | 3499.2 | 3478.6 | 3569.7 | 3651.2 | 3707.1 |
| 15° | 3253.5 | 3242.1 | 3356.7 | 3469.4 | 3543.6 |
| 17.5° | 2990.3 | 2989.9 | 3120.7 | 3260.6 | 3350.1 |
| 20° | 2809.6 | 2815.3 | 2955.6 | 3109.8 | 3214.5 |
| 22.5° | 2628.9 | 2642.2 | 2792.0 | 2952.9 | 3072.8 |
| 25° | 2359.8 | 2378.8 | 2546.7 | 2721.0 | 2848.5 |
| 27.5° | 2101.2 | 2129.0 | 2305.7 | 2486.8 | 2642.1 |
| 30° | 1931.5 | 1963.8 | 2143.7 | 2334.2 | 2494.1 |
| 32.5° | 1764.8 | 1803.2 | 1978.6 | 2180.1 | 2343.1 |
| 35° | 1514.8 | 1552.9 | 1721.2 | 1923.8 | 2098.9 |
| 37.5° | 1256.6 | 1293.9 | 1458.3 | 1657.7 | 1847.0 |
| 40° | 1088.4 | 1130.3 | 1287.0 | 1480.2 | 1672.5 |
| 42.5° | 935.7 | 977.6 | 1125.0 | 1314.9 | 1496.5 |
| 45° | 726.2 | 770.0 | 899.5 | 1074.7 | 1242.2 |
| 47.5° | 552.6 | 600.2 | 713.8 | 872.2 | 1024.9 |
| 50° | 449.8 | 497.4 | 609.4 | 749.0 | 895.6 |
| 52.5° | 367.2 | 413.3 | 514.4 | 646.0 | 780.4 |
| 55° | 260.9 | 304.7 | 393.3 | 505.0 | 621.1 |
| 57.5° | 180.3 | 218.0 | 297.5 | 390.7 | 481.7 |
| 60° | 130.5 | 166.6 | 241.4 | 317.1 | 391.4 |
| 62.5° | 86.8 | 120.0 | 193.1 | 251.1 | 301.0 |
| 65° | 29.2 | 55.9 | 124.6 | 150.3 | 167.4 |
| 67.5° | 14.8 | 17.8 | 65.4 | 69.1 | 74.8 |
| 70° | 11.7 | 11.7 | 31.2 | 33.2 | 38.9 |
| 72.5° | 8.6 | 8.6 | 12.5 | 16.0 | 17.1 |
| 75° | 3.9 | 3.9 | 1.9 | 0.0 | 0.0 |
| 77.5° | 1.9 | 1.9 | 1.6 | 0.0 | 0.0 |
| 80° | 1.9 | 1.9 | 0.0 | 0.0 | 0.0 |
| 82.5° | 0.4 | 0.4 | 0.0 | 0.0 | 0.0 |
| 85° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 87.5° | 0.5 | 1.5 | 4.0 | 2.0 | 2.0 |
| 90° | 2.5 | 7.4 | 20.0 | 10.0 | 10.0 |
| 92.5° | 10.5 | 50.6 | 112.1 | 49.6 | 32.0 |
| 95° | 25.0 | 98.4 | 327.8 | 168.9 | 115.1 |
| 97.5° | 43.5 | 108.1 | 490.5 | 390.0 | 287.3 |
| 100° | 57.6 | 116.3 | 540.5 | 547.8 | 425.4 |
| 102.5° | 69.6 | 124.4 | 554.5 | 682.3 | 577.6 |
| 105° | 90.1 | 136.6 | 553.0 | 839.5 | 783.3 |
| 107.5° | 111.1 | 154.2 | 521.5 | 921.2 | 934.9 |
| 110° | 125.1 | 164.3 | 495.5 | 942.2 | 1001.0 |

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CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|-------|-------|-------|-------|--------|
| 112.5° | 139.1 | 176.3 | 471.5 | 928.9 | 1019.0 |
| 115° | 160.2 | 194.4 | 442.9 | 883.7 | 1008.5 |
| 117.5° | 180.7 | 212.0 | 423.4 | 820.9 | 959.4 |
| 120° | 192.7 | 222.0 | 415.4 | 778.8 | 913.4 |
| 122.5° | 204.7 | 234.1 | 409.4 | 736.7 | 869.3 |
| 125° | 222.7 | 249.6 | 402.9 | 680.9 | 803.3 |
| 127.5° | 237.2 | 264.6 | 397.4 | 636.0 | 739.2 |
| 130° | 245.2 | 274.6 | 395.4 | 607.8 | 703.2 |
| 132.5° | 253.2 | 282.6 | 393.4 | 583.5 | 669.1 |
| 135° | 265.3 | 292.2 | 390.4 | 549.7 | 623.1 |
| 137.5° | 277.8 | 304.2 | 389.9 | 524.4 | 584.6 |
| 140° | 287.8 | 312.2 | 387.9 | 504.3 | 560.5 |
| 142.5° | 295.8 | 318.3 | 387.9 | 490.1 | 538.5 |
| 145° | 307.8 | 327.4 | 385.4 | 468.8 | 505.5 |
| 147.5° | 319.8 | 338.9 | 385.4 | 451.1 | 481.5 |
| 150° | 327.8 | 344.9 | 385.4 | 441.0 | 465.4 |
| 152.5° | 335.8 | 349.0 | 385.4 | 432.8 | 451.4 |
| 155° | 347.8 | 357.6 | 385.4 | 423.2 | 435.4 |
| 157.5° | 356.8 | 366.1 | 385.4 | 414.6 | 423.4 |
| 160° | 362.8 | 370.2 | 385.4 | 410.5 | 415.4 |
| 162.5° | 368.9 | 374.2 | 385.4 | 406.5 | 411.4 |
| 165° | 375.4 | 380.3 | 385.4 | 400.5 | 405.4 |
| 167.5° | 381.4 | 383.8 | 387.9 | 397.9 | 399.9 |
| 170° | 385.4 | 387.8 | 387.9 | 397.9 | 397.9 |
| 172.5° | 387.4 | 387.9 | 387.9 | 395.8 | 393.9 |
| 175° | 390.4 | 390.4 | 387.9 | 392.9 | 392.9 |
| 177.5° | 390.4 | 390.4 | 388.4 | 392.3 | 390.4 |
| 180° | 390.4 | 390.4 | 390.4 | 390.4 | 390.4 |

(END OF REPORT)