

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: P518336

Luminaire Tested: **SQ4-BB-025U-075D-930-1D-UNV-STD-W-4**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518336
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-930-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 250 LUMENS PER FOOT
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

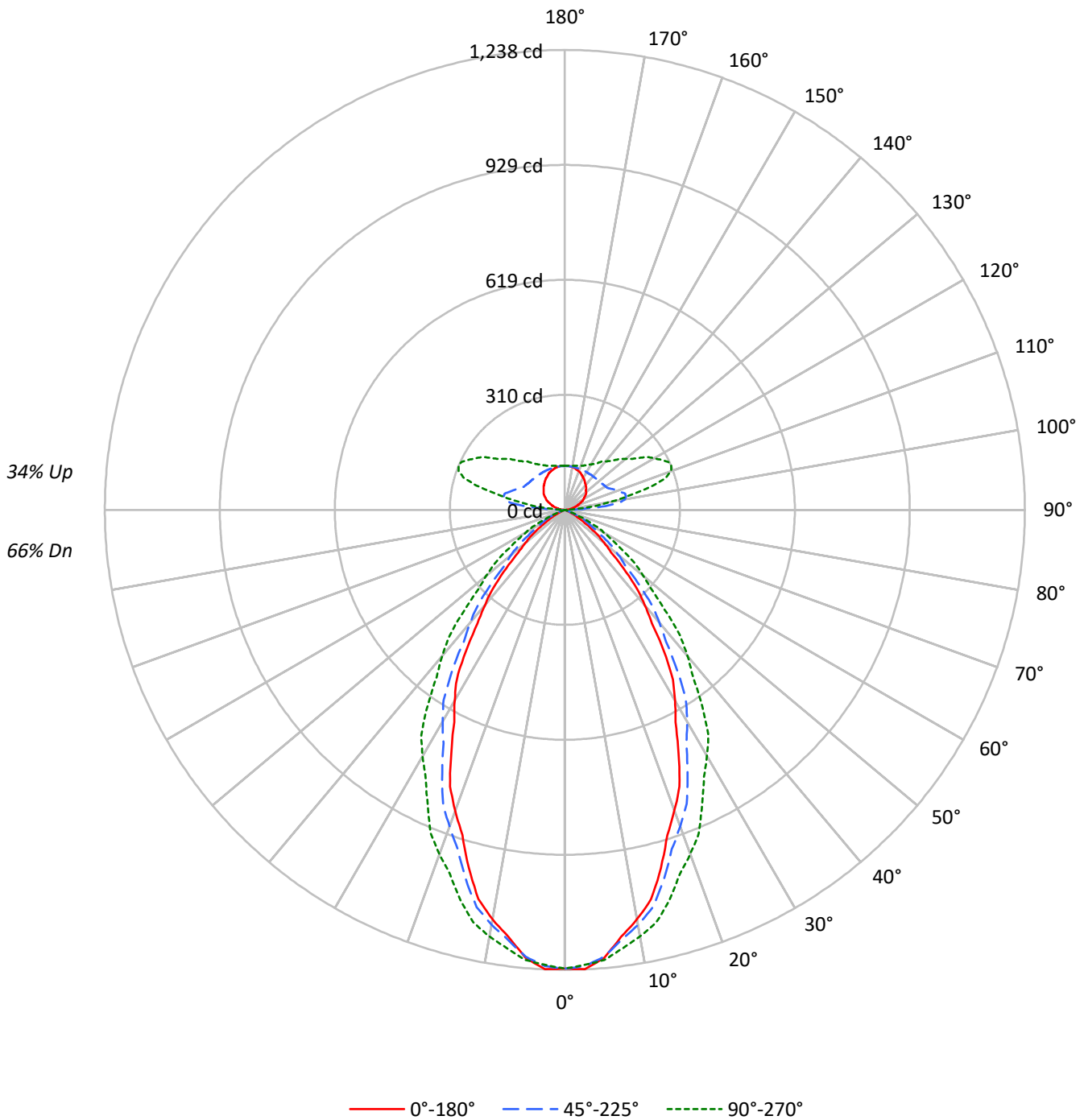
Lumens per Lamp: N/A
Luminaire Lumens: 2242.4 lumens
Efficiency: N/A
Efficacy: 75.0 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 29.9
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: P518336

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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 | 71 | 71 | 71 | 66 | | | | |
| 1 | 104 | 100 | 97 | 94 | 98 | 95 | 92 | 89 | 84 | 82 | 80 | 75 | 73 | 72 | 66 | 65 | 64 | 60 | | | | |
| 2 | 96 | 90 | 85 | 81 | 91 | 86 | 81 | 77 | 77 | 73 | 71 | 69 | 66 | 64 | 61 | 59 | 58 | 54 | | | | |
| 3 | 90 | 82 | 75 | 71 | 84 | 78 | 72 | 68 | 70 | 66 | 62 | 63 | 60 | 57 | 56 | 54 | 52 | 49 | | | | |
| 4 | 83 | 74 | 67 | 62 | 79 | 71 | 65 | 60 | 64 | 59 | 56 | 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 | 42 | 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 | 43 | 38 | 35 | 39 | 36 | 33 | 31 | | | | |
| 9 | 60 | 48 | 42 | 37 | 57 | 47 | 40 | 36 | 43 | 38 | 34 | 40 | 35 | 32 | 37 | 33 | 31 | 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° | 11393 | 11393 | 11393 |
| 5° | 11210 | 11182 | 11265 |
| 10° | 10489 | 10629 | 10926 |
| 15° | 9535 | 9837 | 10386 |
| 20° | 8464 | 8904 | 9684 |
| 25° | 7371 | 7955 | 8897 |
| 30° | 6313 | 7008 | 8153 |
| 35° | 5235 | 5948 | 7253 |
| 40° | 4023 | 4756 | 6181 |
| 45° | 2907 | 3601 | 4974 |
| 50° | 1981 | 2684 | 3944 |
| 55° | 1288 | 1942 | 3066 |
| 60° | 738 | 1367 | 2216 |
| 65° | 196 | 834 | 1122 |
| 70° | 97 | 259 | 321 |
| 75° | 43 | 21 | 0 |
| 80° | 32 | 0 | 0 |
| 85° | 0 | 0 | 0 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 112.7 | 5.0 |
| 10°-20° | 288.2 | 12.9 |
| 20°-30° | 360.8 | 16.1 |
| 30°-40° | 333.3 | 14.9 |
| 40°-50° | 223.9 | 10.0 |
| 50°-60° | 115.7 | 5.2 |
| 60°-70° | 36.2 | 1.6 |
| 70°-80° | 2.3 | 0.1 |
| 80°-90° | 0.7 | 0.0 |
| 90°-100° | 57.8 | 2.6 |
| 100°-110° | 151.9 | 6.8 |
| 110°-120° | 157.6 | 7.0 |
| 120°-130° | 126.4 | 5.6 |
| 130°-140° | 99.2 | 4.4 |
| 140°-150° | 76.1 | 3.4 |
| 150°-160° | 54.8 | 2.4 |
| 160°-170° | 33.5 | 1.5 |
| 170°-180° | 11.3 | 0.5 |
| 0°-30° | 761.7 | 34.0 |
| 0°-40° | 1094.9 | 48.8 |
| 0°-60° | 1434.5 | 64.0 |
| 0°-90° | 1473.7 | 65.7 |
| 90°-120° | 367.3 | 16.4 |
| 90°-150° | 669.0 | 29.8 |
| 90°-180° | 769.0 | 34.3 |
| 0°-180° | 2242.4 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|------|-------|------|-------|------|------|
| 0° | 1235 | 1235 | 1235 | 1235 | 1235 | |
| 5° | 1210 | 1198 | 1207 | 1212 | 1216 | 112 |
| 15° | 998 | 995 | 1030 | 1064 | 1087 | 278 |
| 25° | 724 | 730 | 781 | 835 | 874 | 332 |
| 35° | 465 | 476 | 528 | 590 | 644 | 288 |
| 45° | 223 | 236 | 276 | 330 | 381 | 175 |
| 55° | 80 | 94 | 121 | 155 | 191 | 75 |
| 65° | 9 | 17 | 38 | 46 | 51 | 15 |
| 75° | 1 | 1 | 1 | 0 | 0 | 2 |
| 85° | 0 | 0 | 0 | 0 | 0 | 0 |
| 90° | 1 | 2 | 6 | 3 | 3 | 1 |
| 95° | 8 | 30 | 100 | 51 | 35 | 8 |
| 105° | 27 | 42 | 168 | 255 | 238 | 29 |
| 115° | 49 | 59 | 135 | 268 | 306 | 48 |
| 125° | 68 | 76 | 122 | 207 | 244 | 60 |
| 135° | 81 | 89 | 119 | 167 | 189 | 62 |
| 145° | 94 | 99 | 117 | 142 | 154 | 59 |
| 155° | 106 | 109 | 117 | 129 | 132 | 49 |
| 165° | 114 | 116 | 117 | 122 | 123 | 32 |
| 175° | 119 | 119 | 118 | 119 | 119 | 11 |
| 180° | 119 | 119 | 119 | 119 | 119 | |



TEST NUMBER: P518336

CATALOG NUMBER: SQ4-BB-025U-075D-930-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|--------|--------|--------|--------|--------|
| 0° | 1234.9 | 1234.9 | 1234.9 | 1234.9 | 1234.9 |
| 2.5° | 1237.7 | 1226.0 | 1229.1 | 1229.0 | 1225.8 |
| 5° | 1210.4 | 1198.1 | 1207.4 | 1211.7 | 1216.3 |
| 7.5° | 1159.2 | 1149.6 | 1167.5 | 1180.8 | 1190.5 |
| 10° | 1119.6 | 1111.4 | 1134.5 | 1152.7 | 1166.2 |
| 12.5° | 1073.7 | 1067.4 | 1095.3 | 1120.3 | 1137.5 |
| 15° | 998.3 | 994.8 | 1029.9 | 1064.5 | 1087.3 |
| 17.5° | 917.5 | 917.4 | 957.5 | 1000.5 | 1027.9 |
| 20° | 862.1 | 863.8 | 906.9 | 954.2 | 986.3 |
| 22.5° | 806.6 | 810.7 | 856.7 | 906.0 | 942.8 |
| 25° | 724.1 | 729.9 | 781.4 | 834.9 | 874.0 |
| 27.5° | 644.7 | 653.3 | 707.5 | 763.0 | 810.7 |
| 30° | 592.6 | 602.6 | 657.8 | 716.2 | 765.3 |
| 32.5° | 541.5 | 553.3 | 607.1 | 668.9 | 718.9 |
| 35° | 464.8 | 476.5 | 528.1 | 590.3 | 644.0 |
| 37.5° | 385.6 | 397.0 | 447.5 | 508.6 | 566.7 |
| 40° | 334.0 | 346.8 | 394.9 | 454.2 | 513.2 |
| 42.5° | 287.1 | 300.0 | 345.2 | 403.4 | 459.2 |
| 45° | 222.8 | 236.3 | 276.0 | 329.7 | 381.2 |
| 47.5° | 169.5 | 184.1 | 219.0 | 267.6 | 314.5 |
| 50° | 138.0 | 152.6 | 187.0 | 229.8 | 274.8 |
| 52.5° | 112.7 | 126.8 | 157.8 | 198.2 | 239.4 |
| 55° | 80.1 | 93.5 | 120.7 | 154.9 | 190.6 |
| 57.5° | 55.3 | 66.9 | 91.3 | 119.9 | 147.8 |
| 60° | 40.0 | 51.1 | 74.1 | 97.3 | 120.1 |
| 62.5° | 26.6 | 36.8 | 59.3 | 77.1 | 92.4 |
| 65° | 9.0 | 17.1 | 38.2 | 46.1 | 51.4 |
| 67.5° | 4.5 | 5.5 | 20.1 | 21.2 | 22.9 |
| 70° | 3.6 | 3.6 | 9.6 | 10.2 | 11.9 |
| 72.5° | 2.6 | 2.6 | 3.8 | 4.9 | 5.3 |
| 75° | 1.2 | 1.2 | 0.6 | 0.0 | 0.0 |
| 77.5° | 0.6 | 0.6 | 0.5 | 0.0 | 0.0 |
| 80° | 0.6 | 0.6 | 0.0 | 0.0 | 0.0 |
| 82.5° | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 |
| 85° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 87.5° | 0.2 | 0.4 | 1.2 | 0.6 | 0.6 |
| 90° | 0.8 | 2.2 | 6.1 | 3.0 | 3.0 |
| 92.5° | 3.2 | 15.4 | 34.1 | 15.1 | 9.7 |
| 95° | 7.6 | 29.9 | 99.6 | 51.3 | 35.0 |
| 97.5° | 13.2 | 32.8 | 149.0 | 118.5 | 87.3 |
| 100° | 17.5 | 35.3 | 164.2 | 166.4 | 129.2 |
| 102.5° | 21.1 | 37.8 | 168.5 | 207.3 | 175.4 |
| 105° | 27.4 | 41.5 | 168.0 | 255.0 | 237.9 |
| 107.5° | 33.8 | 46.8 | 158.4 | 279.8 | 284.0 |
| 110° | 38.0 | 49.9 | 150.5 | 286.2 | 304.1 |

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CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|-------|-------|-------|-------|-------|
| 112.5° | 42.3 | 53.6 | 143.2 | 282.2 | 309.5 |
| 115° | 48.7 | 59.1 | 134.6 | 268.4 | 306.4 |
| 117.5° | 54.9 | 64.4 | 128.6 | 249.4 | 291.5 |
| 120° | 58.5 | 67.5 | 126.2 | 236.6 | 277.5 |
| 122.5° | 62.2 | 71.1 | 124.4 | 223.8 | 264.1 |
| 125° | 67.7 | 75.8 | 122.4 | 206.9 | 244.0 |
| 127.5° | 72.1 | 80.4 | 120.7 | 193.2 | 224.6 |
| 130° | 74.5 | 83.4 | 120.1 | 184.6 | 213.6 |
| 132.5° | 76.9 | 85.8 | 119.5 | 177.3 | 203.3 |
| 135° | 80.6 | 88.8 | 118.6 | 167.0 | 189.3 |
| 137.5° | 84.4 | 92.4 | 118.4 | 159.3 | 177.6 |
| 140° | 87.4 | 94.9 | 117.8 | 153.2 | 170.3 |
| 142.5° | 89.9 | 96.7 | 117.8 | 148.9 | 163.6 |
| 145° | 93.5 | 99.4 | 117.1 | 142.4 | 153.6 |
| 147.5° | 97.2 | 102.9 | 117.1 | 137.0 | 146.3 |
| 150° | 99.6 | 104.8 | 117.1 | 134.0 | 141.4 |
| 152.5° | 102.0 | 106.0 | 117.1 | 131.5 | 137.1 |
| 155° | 105.7 | 108.6 | 117.1 | 128.6 | 132.3 |
| 157.5° | 108.4 | 111.2 | 117.1 | 125.9 | 128.6 |
| 160° | 110.2 | 112.5 | 117.1 | 124.7 | 126.2 |
| 162.5° | 112.0 | 113.7 | 117.1 | 123.5 | 125.0 |
| 165° | 114.0 | 115.5 | 117.1 | 121.7 | 123.1 |
| 167.5° | 115.9 | 116.6 | 117.8 | 120.9 | 121.5 |
| 170° | 117.1 | 117.8 | 117.8 | 120.9 | 120.9 |
| 172.5° | 117.7 | 117.8 | 117.8 | 120.2 | 119.7 |
| 175° | 118.6 | 118.6 | 117.8 | 119.3 | 119.3 |
| 177.5° | 118.6 | 118.6 | 118.0 | 119.2 | 118.6 |
| 180° | 118.6 | 118.6 | 118.6 | 118.6 | 118.6 |

(END OF REPORT)