

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: P563809

Luminaire Tested: **SQ4-PP3-150U-100D-840-1D-UNV-STD-W-12**

Issue Date: 7/30/2021

Test Information

Test Method: LM-79-2019
Report Number: P563809
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-25, G2-2103-172-1)
Test Lab: INNOVATION CENTER
Issue Date: 7/30/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-PP3-150U-100D-840-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE PRISM CONTINUOUS LENS.
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

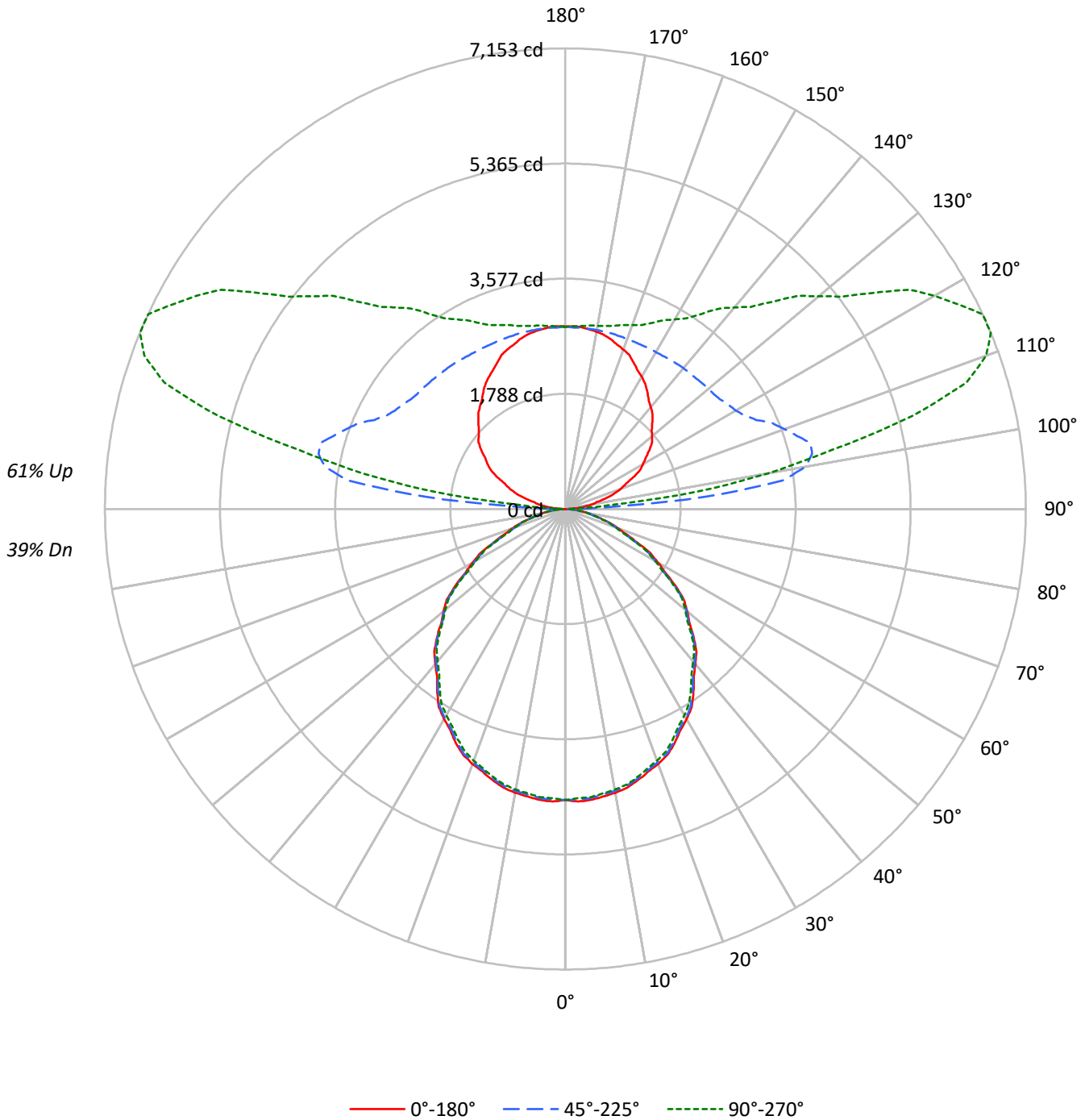
Lumens per Lamp: N/A
Luminaire Lumens: 29827.4 lumens
Efficiency: N/A
Efficacy: 133.3 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.22 / 1.33
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 223.7
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: P563809

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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 | 104 | 104 | 104 | 104 | 95 | 95 | 95 | 95 | 77 | 77 | 77 | 61 | 61 | 61 | 46 | 46 | 46 | 39 |
| 1 | 95 | 91 | 87 | 84 | 87 | 83 | 80 | 77 | 68 | 66 | 64 | 54 | 52 | 51 | 41 | 40 | 39 | 33 |
| 2 | 87 | 80 | 74 | 69 | 79 | 73 | 68 | 63 | 60 | 56 | 53 | 47 | 45 | 43 | 36 | 34 | 33 | 28 |
| 3 | 79 | 70 | 63 | 57 | 72 | 64 | 58 | 53 | 53 | 48 | 44 | 42 | 39 | 36 | 32 | 30 | 28 | 24 |
| 4 | 73 | 62 | 54 | 49 | 66 | 57 | 50 | 45 | 47 | 42 | 38 | 37 | 34 | 31 | 29 | 26 | 24 | 20 |
| 5 | 67 | 55 | 47 | 42 | 60 | 51 | 44 | 39 | 42 | 37 | 33 | 33 | 30 | 27 | 26 | 23 | 21 | 18 |
| 6 | 61 | 50 | 42 | 36 | 56 | 45 | 38 | 33 | 38 | 32 | 28 | 30 | 26 | 24 | 23 | 21 | 19 | 16 |
| 7 | 57 | 45 | 37 | 31 | 51 | 41 | 34 | 29 | 34 | 29 | 25 | 27 | 24 | 21 | 21 | 19 | 17 | 14 |
| 8 | 52 | 40 | 33 | 28 | 48 | 37 | 30 | 26 | 31 | 26 | 22 | 25 | 21 | 18 | 20 | 17 | 15 | 12 |
| 9 | 49 | 37 | 30 | 25 | 44 | 34 | 27 | 23 | 28 | 23 | 20 | 23 | 19 | 17 | 18 | 15 | 13 | 11 |
| 10 | 46 | 34 | 27 | 22 | 41 | 31 | 25 | 21 | 26 | 21 | 18 | 21 | 18 | 15 | 17 | 14 | 12 | 10 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|-------|-------|-------|
| 0° | 13900 | 13900 | 13900 |
| 5° | 14002 | 13916 | 13867 |
| 10° | 13978 | 13879 | 13817 |
| 15° | 13886 | 13810 | 13734 |
| 20° | 13793 | 13716 | 13612 |
| 25° | 13630 | 13535 | 13401 |
| 30° | 13377 | 13307 | 13138 |
| 35° | 13027 | 12938 | 12775 |
| 40° | 12611 | 12531 | 12388 |
| 45° | 12266 | 12180 | 12060 |
| 50° | 11826 | 11750 | 11636 |
| 55° | 11214 | 11065 | 10980 |
| 60° | 10208 | 9916 | 9868 |
| 65° | 8994 | 8619 | 8590 |
| 70° | 7764 | 7444 | 7444 |
| 75° | 6684 | 6590 | 6495 |
| 80° | 5892 | 5963 | 5823 |
| 85° | 4612 | 5032 | 5032 |



TEST NUMBER: P563809

CATALOG NUMBER: SQ4-PP3-150U-100D-840-1D-UNV-STD-W-12

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 427.4 | 1.4 |
| 10°-20° | 1220.3 | 4.1 |
| 20°-30° | 1827.8 | 6.1 |
| 30°-40° | 2144.0 | 7.2 |
| 40°-50° | 2150.7 | 7.2 |
| 50°-60° | 1834.7 | 6.2 |
| 60°-70° | 1196.5 | 4.0 |
| 70°-80° | 600.3 | 2.0 |
| 80°-90° | 172.0 | 0.6 |
| 90°-100° | 1315.8 | 4.4 |
| 100°-110° | 3557.5 | 11.9 |
| 110°-120° | 3740.2 | 12.5 |
| 120°-130° | 3038.1 | 10.2 |
| 130°-140° | 2383.1 | 8.0 |
| 140°-150° | 1829.1 | 6.1 |
| 150°-160° | 1315.4 | 4.4 |
| 160°-170° | 803.6 | 2.7 |
| 170°-180° | 270.9 | 0.9 |
| 0°-30° | 3475.5 | 11.7 |
| 0°-40° | 5619.5 | 18.8 |
| 0°-60° | 9604.8 | 32.2 |
| 0°-90° | 11573.7 | 38.8 |
| 90°-120° | 8613.5 | 28.9 |
| 90°-150° | 15863.8 | 53.2 |
| 90°-180° | 18254.0 | 61.2 |
| 0°-180° | 29827.4 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|------|-------|------|-------|------|------|
| 0° | 4520 | 4520 | 4520 | 4520 | 4520 | |
| 5° | 4536 | 4493 | 4508 | 4492 | 4492 | 431 |
| 15° | 4361 | 4319 | 4337 | 4321 | 4314 | 1230 |
| 25° | 4017 | 3970 | 3989 | 3953 | 3949 | 1847 |
| 35° | 3470 | 3435 | 3446 | 3406 | 3403 | 2168 |
| 45° | 2820 | 2801 | 2800 | 2773 | 2773 | 2172 |
| 55° | 2092 | 2084 | 2064 | 2052 | 2048 | 1859 |
| 65° | 1236 | 1213 | 1184 | 1176 | 1180 | 1233 |
| 75° | 562 | 562 | 555 | 550 | 547 | 610 |
| 85° | 131 | 142 | 143 | 143 | 143 | 154 |
| 90° | 6 | 18 | 40 | 43 | 40 | 18 |
| 95° | 204 | 717 | 2188 | 1132 | 674 | 214 |
| 105° | 661 | 1022 | 3947 | 5822 | 5583 | 696 |
| 115° | 1164 | 1423 | 3273 | 6336 | 7153 | 1150 |
| 125° | 1594 | 1826 | 2950 | 4978 | 5848 | 1421 |
| 135° | 1911 | 2137 | 2871 | 4020 | 4550 | 1477 |
| 145° | 2222 | 2388 | 2831 | 3441 | 3703 | 1390 |
| 155° | 2508 | 2606 | 2807 | 3086 | 3188 | 1157 |
| 165° | 2731 | 2757 | 2819 | 2929 | 2944 | 769 |
| 175° | 2834 | 2831 | 2822 | 2858 | 2852 | 269 |
| 180° | 2831 | 2831 | 2831 | 2831 | 2831 | |



TEST NUMBER: P563809

CATALOG NUMBER: SQ4-PP3-150U-100D-840-1D-UNV-STD-W-12

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|--------|--------|--------|--------|--------|
| 0° | 4519.6 | 4519.6 | 4519.6 | 4519.6 | 4519.6 |
| 2.5° | 4548.1 | 4511.0 | 4519.6 | 4512.9 | 4494.3 |
| 5° | 4535.5 | 4492.9 | 4507.7 | 4491.9 | 4491.9 |
| 7.5° | 4504.6 | 4458.1 | 4472.9 | 4457.0 | 4456.3 |
| 10° | 4476.1 | 4429.6 | 4444.4 | 4428.4 | 4424.6 |
| 12.5° | 4434.9 | 4388.4 | 4406.3 | 4387.3 | 4386.5 |
| 15° | 4361.2 | 4318.6 | 4337.4 | 4321.4 | 4313.7 |
| 17.5° | 4278.0 | 4231.5 | 4254.2 | 4232.0 | 4228.9 |
| 20° | 4214.6 | 4168.1 | 4190.9 | 4159.2 | 4159.2 |
| 22.5° | 4138.6 | 4092.1 | 4118.0 | 4076.8 | 4076.8 |
| 25° | 4016.6 | 3970.1 | 3988.8 | 3953.1 | 3949.2 |
| 27.5° | 3871.6 | 3825.9 | 3845.4 | 3805.0 | 3804.3 |
| 30° | 3767.0 | 3724.4 | 3747.2 | 3703.6 | 3699.7 |
| 32.5° | 3652.9 | 3613.4 | 3630.0 | 3586.3 | 3582.4 |
| 35° | 3469.9 | 3435.1 | 3446.2 | 3406.5 | 3402.6 |
| 37.5° | 3277.4 | 3241.8 | 3254.4 | 3220.3 | 3218.8 |
| 40° | 3141.2 | 3117.9 | 3121.4 | 3093.5 | 3085.7 |
| 42.5° | 3014.4 | 2988.1 | 2991.4 | 2963.7 | 2962.1 |
| 45° | 2820.3 | 2800.9 | 2800.5 | 2772.8 | 2772.8 |
| 47.5° | 2614.3 | 2599.6 | 2595.3 | 2572.3 | 2571.6 |
| 50° | 2471.7 | 2460.1 | 2455.9 | 2436.0 | 2432.1 |
| 52.5° | 2322.8 | 2317.4 | 2303.8 | 2287.1 | 2286.4 |
| 55° | 2091.5 | 2083.7 | 2063.7 | 2051.8 | 2047.9 |
| 57.5° | 1840.3 | 1824.8 | 1802.3 | 1784.9 | 1788.0 |
| 60° | 1659.7 | 1644.2 | 1612.2 | 1604.3 | 1604.3 |
| 62.5° | 1485.4 | 1466.8 | 1434.7 | 1423.8 | 1430.0 |
| 65° | 1235.9 | 1212.6 | 1184.4 | 1176.5 | 1180.4 |
| 67.5° | 1009.3 | 988.4 | 957.8 | 957.7 | 954.6 |
| 70° | 863.5 | 851.9 | 827.9 | 827.9 | 827.9 |
| 72.5° | 733.6 | 728.2 | 710.6 | 710.6 | 707.5 |
| 75° | 562.5 | 562.5 | 554.6 | 550.5 | 546.6 |
| 77.5° | 421.5 | 423.0 | 419.1 | 415.0 | 408.0 |
| 80° | 332.7 | 340.5 | 336.7 | 332.6 | 328.8 |
| 82.5° | 250.3 | 258.1 | 257.5 | 250.3 | 249.6 |
| 85° | 130.7 | 142.3 | 142.6 | 142.6 | 142.6 |
| 87.5° | 36.1 | 50.9 | 58.6 | 59.3 | 61.8 |
| 90° | 6.1 | 18.0 | 39.6 | 42.6 | 39.6 |
| 92.5° | 86.6 | 315.4 | 622.3 | 270.1 | 195.7 |
| 95° | 204.2 | 716.7 | 2188.2 | 1132.4 | 673.5 |
| 97.5° | 327.9 | 822.0 | 3410.8 | 2822.7 | 2073.0 |
| 100° | 420.6 | 864.6 | 3791.2 | 3953.8 | 3196.9 |
| 102.5° | 505.9 | 923.7 | 3925.3 | 4811.4 | 4245.3 |
| 105° | 661.3 | 1021.9 | 3946.6 | 5821.5 | 5583.1 |
| 107.5° | 805.2 | 1134.1 | 3774.1 | 6451.7 | 6530.9 |
| 110° | 917.3 | 1215.3 | 3620.5 | 6620.9 | 6957.6 |



TEST NUMBER: P563809

CATALOG NUMBER: SQ4-PP3-150U-100D-840-1D-UNV-STD-W-12

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|--------|--------|--------|--------|--------|
| 112.5° | 1017.3 | 1296.2 | 3479.1 | 6587.1 | 7152.6 |
| 115° | 1164.2 | 1423.4 | 3273.1 | 6336.2 | 7152.6 |
| 117.5° | 1308.0 | 1551.2 | 3137.2 | 5952.8 | 6878.3 |
| 120° | 1395.8 | 1634.2 | 3056.7 | 5677.7 | 6622.4 |
| 122.5° | 1478.7 | 1712.3 | 3007.9 | 5382.9 | 6334.7 |
| 125° | 1593.9 | 1826.3 | 2950.0 | 4978.2 | 5848.3 |
| 127.5° | 1699.9 | 1928.2 | 2915.9 | 4647.9 | 5413.1 |
| 130° | 1758.4 | 1993.9 | 2901.3 | 4443.8 | 5135.1 |
| 132.5° | 1819.4 | 2052.4 | 2886.7 | 4259.7 | 4896.2 |
| 135° | 1910.8 | 2137.3 | 2870.8 | 4019.6 | 4550.0 |
| 137.5° | 2002.9 | 2216.8 | 2857.4 | 3824.8 | 4256.8 |
| 140° | 2066.2 | 2265.9 | 2852.5 | 3699.3 | 4083.7 |
| 142.5° | 2127.2 | 2314.9 | 2842.8 | 3586.1 | 3922.8 |
| 145° | 2221.7 | 2388.5 | 2831.2 | 3440.6 | 3702.8 |
| 147.5° | 2307.6 | 2455.4 | 2817.8 | 3308.7 | 3510.2 |
| 150° | 2371.0 | 2502.1 | 2812.9 | 3237.1 | 3398.0 |
| 152.5° | 2429.5 | 2543.9 | 2810.5 | 3170.6 | 3302.9 |
| 155° | 2508.1 | 2606.5 | 2806.8 | 3086.4 | 3187.8 |
| 157.5° | 2589.8 | 2658.4 | 2807.4 | 3027.7 | 3094.5 |
| 160° | 2636.1 | 2692.8 | 2809.9 | 2990.7 | 3038.4 |
| 162.5° | 2672.7 | 2719.8 | 2812.3 | 2961.2 | 2997.0 |
| 165° | 2730.6 | 2757.4 | 2819.0 | 2929.0 | 2943.9 |
| 167.5° | 2770.2 | 2788.7 | 2819.6 | 2901.4 | 2908.6 |
| 170° | 2794.6 | 2803.6 | 2822.0 | 2889.1 | 2889.1 |
| 172.5° | 2814.1 | 2815.9 | 2822.0 | 2874.4 | 2872.0 |
| 175° | 2834.2 | 2831.3 | 2822.0 | 2858.5 | 2852.5 |
| 177.5° | 2840.9 | 2833.8 | 2821.4 | 2845.7 | 2838.5 |
| 180° | 2831.2 | 2831.2 | 2831.2 | 2831.2 | 2831.2 |

(END OF REPORT)