

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: P563620

Luminaire Tested: **SQ4-PP3-100U-100D-840-1D-UNV-STD-W-8**

Issue Date: 7/30/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P563620  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-23, 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-PP3-100U-100D-840-1D-UNV-STD-W-8  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE PRISM CONTINUOUS LENS.  
DOWNLIGHT 1000 LUMENS PER FOOT  
UPLIGHT 1000 LUMENS PER FOOT  
Light Source: 4000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

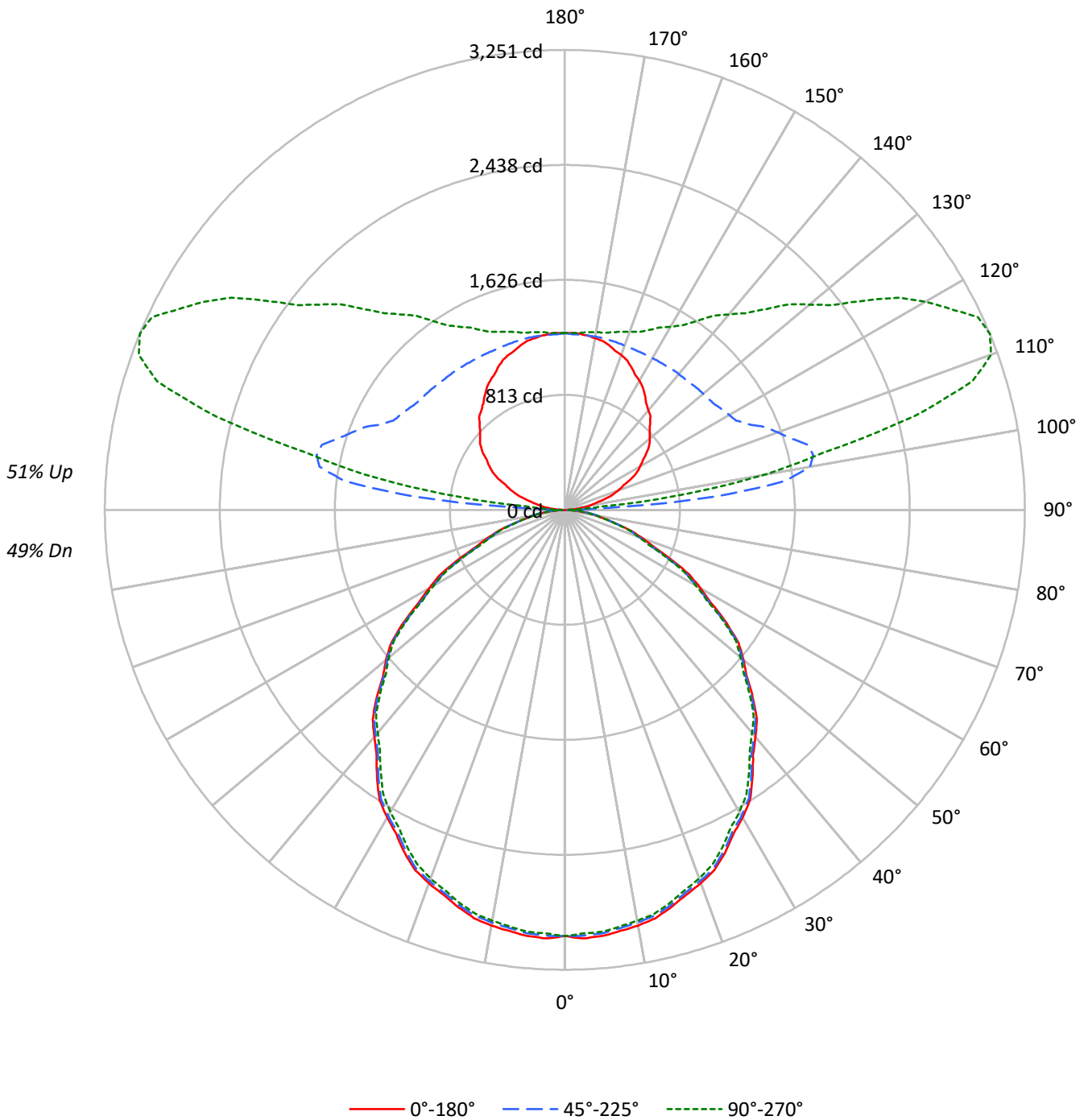
Lumens per Lamp: N/A  
Luminaire Lumens: 15827.9 lumens  
Efficiency: N/A  
Efficacy: 130.6 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.22 / 1.33  
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')  
CIE Type: General Diffuse

Input Watts (W): 121.2  
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	107	107	107	107	98	98	98	98	83	83	83	68	68	68	55	55	55	49
1	98	93	90	86	90	86	83	80	73	70	68	60	59	57	49	48	47	41
2	89	82	76	71	82	76	70	66	64	60	57	53	50	48	43	41	40	35
3	81	72	65	59	75	67	60	55	57	52	48	47	44	41	38	36	34	30
4	74	64	56	50	68	59	52	47	50	45	41	42	38	35	34	32	29	26
5	68	57	49	43	63	53	46	40	45	40	35	38	34	30	31	28	26	22
6	63	51	43	37	58	47	40	35	41	35	31	34	30	27	28	25	23	20
7	58	46	38	33	54	43	36	31	37	31	27	31	27	24	26	22	20	17
8	54	42	34	29	50	39	32	27	34	28	24	28	24	21	24	20	18	16
9	50	38	31	26	46	36	29	24	31	25	22	26	22	19	22	19	16	14
10	47	35	28	23	43	33	26	22	28	23	19	24	20	17	20	17	15	13

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	13900	13900	13900
5°	14001	13916	13867
10°	13978	13879	13817
15°	13886	13810	13734
20°	13793	13716	13612
25°	13629	13535	13401
30°	13377	13307	13138
35°	13027	12938	12775
40°	12611	12531	12388
45°	12266	12180	12059
50°	11826	11750	11636
55°	11214	11065	10981
60°	10209	9916	9867
65°	8993	8619	8589
70°	7765	7444	7444
75°	6684	6589	6495
80°	5892	5964	5823
85°	4610	5034	5034



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	284.9	1.8
10°-20°	813.5	5.1
20°-30°	1218.6	7.7
30°-40°	1429.3	9.0
40°-50°	1433.8	9.1
50°-60°	1223.1	7.7
60°-70°	797.7	5.0
70°-80°	400.2	2.5
80°-90°	113.4	0.7
90°-100°	584.8	3.7
100°-110°	1614.4	10.2
110°-120°	1664.9	10.5
120°-130°	1337.9	8.5
130°-140°	1051.5	6.6
140°-150°	806.4	5.1
150°-160°	579.6	3.7
160°-170°	354.4	2.2
170°-180°	119.5	0.8
0°-30°	2317.0	14.6
0°-40°	3746.3	23.7
0°-60°	6403.2	40.5
0°-90°	7714.4	48.7
90°-120°	3864.1	24.4
90°-150°	7060.0	44.6
90°-180°	8113.0	51.3
0°-180°	15827.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	3013	3013	3013	3013	3013	
5°	3024	2995	3005	2995	2995	287
15°	2908	2879	2892	2881	2876	820
25°	2678	2647	2659	2635	2633	1231
35°	2313	2290	2297	2271	2268	1445
45°	1880	1867	1867	1848	1848	1448
55°	1394	1389	1376	1368	1365	1239
65°	824	808	790	784	787	822
75°	375	375	370	367	364	407
85°	87	95	95	95	95	102
90°	4	8	16	18	20	9
95°	86	316	1061	436	284	92
105°	288	444	1776	2712	2553	306
115°	516	623	1430	2832	3221	507
125°	707	805	1297	2194	2575	629
135°	851	943	1261	1777	2004	659
145°	987	1055	1245	1513	1628	618
155°	1113	1150	1235	1358	1401	513
165°	1205	1220	1241	1289	1299	340
175°	1249	1251	1243	1261	1257	119
180°	1249	1249	1249	1249	1249	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	3013.1	3013.1	3013.1	3013.1	3013.1
2.5°	3032.1	3007.3	3013.1	3008.6	2996.2
5°	3023.6	2995.2	3005.2	2994.6	2994.6
7.5°	3003.1	2972.1	2981.9	2971.3	2970.8
10°	2984.0	2953.1	2962.9	2952.3	2949.7
12.5°	2956.6	2925.6	2937.6	2924.9	2924.4
15°	2907.5	2879.1	2891.6	2880.9	2875.8
17.5°	2852.0	2821.0	2836.2	2821.3	2819.3
20°	2809.7	2778.8	2793.9	2772.8	2772.8
22.5°	2759.0	2728.1	2745.3	2717.9	2717.9
25°	2677.7	2646.7	2659.2	2635.4	2632.8
27.5°	2581.1	2550.6	2563.6	2536.7	2536.2
30°	2511.3	2482.9	2498.1	2469.0	2466.5
32.5°	2435.3	2409.0	2420.0	2390.9	2388.3
35°	2313.3	2290.1	2297.4	2271.0	2268.4
37.5°	2184.9	2161.2	2169.6	2146.9	2145.9
40°	2094.1	2078.6	2080.9	2062.3	2057.1
42.5°	2009.6	1992.0	1994.3	1975.8	1974.7
45°	1880.2	1867.3	1867.0	1848.5	1848.5
47.5°	1742.9	1733.1	1730.2	1714.9	1714.4
50°	1647.8	1640.1	1637.3	1624.0	1621.4
52.5°	1548.5	1544.9	1535.9	1524.8	1524.2
55°	1394.3	1389.1	1375.8	1367.8	1365.3
57.5°	1226.9	1216.6	1201.5	1190.0	1192.0
60°	1106.5	1096.1	1074.8	1069.5	1069.5
62.5°	990.3	977.9	956.5	949.2	953.3
65°	823.9	808.4	789.6	784.4	786.9
67.5°	672.9	658.9	638.5	638.5	636.4
70°	575.7	567.9	551.9	551.9	551.9
72.5°	489.1	485.5	473.7	473.7	471.6
75°	375.0	375.0	369.7	367.0	364.4
77.5°	281.0	282.0	279.4	276.6	272.0
80°	221.8	227.0	224.5	221.8	219.2
82.5°	166.9	172.1	171.6	166.9	166.4
85°	87.1	94.9	95.1	95.1	95.1
87.5°	24.0	33.1	37.0	37.5	39.9
90°	4.0	7.9	16.0	18.0	20.0
92.5°	36.0	149.3	266.9	97.4	75.9
95°	85.9	316.4	1060.9	436.1	283.7
97.5°	142.3	354.4	1571.6	1210.0	876.3
100°	183.8	377.2	1760.2	1772.6	1440.5
102.5°	223.8	403.1	1796.9	2190.2	1875.3
105°	287.7	444.0	1776.2	2711.6	2553.4
107.5°	355.6	494.7	1677.1	2963.1	3020.9
110°	403.6	528.6	1600.3	3017.1	3204.7



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	446.7	567.1	1528.4	2974.4	3251.0
115°	515.5	622.9	1430.5	2831.9	3220.7
117.5°	575.4	682.5	1366.2	2631.3	3073.6
120°	615.4	720.9	1340.6	2495.6	2941.0
122.5°	653.7	754.5	1319.8	2368.8	2790.7
125°	707.3	804.9	1296.7	2194.4	2575.3
127.5°	752.8	850.5	1283.1	2047.0	2375.5
130°	783.2	880.9	1276.7	1956.8	2255.7
132.5°	812.0	904.9	1270.3	1881.0	2151.8
135°	851.1	942.9	1260.7	1777.3	2003.9
137.5°	895.1	978.7	1255.9	1690.3	1883.7
140°	919.1	1001.1	1252.7	1632.2	1802.1
142.5°	946.2	1022.0	1249.5	1580.6	1730.2
145°	987.0	1055.4	1244.7	1513.1	1628.3
147.5°	1026.1	1085.9	1240.3	1456.1	1545.6
150°	1054.9	1103.7	1238.7	1422.2	1494.5
152.5°	1077.3	1123.0	1237.1	1393.1	1452.9
155°	1112.9	1150.0	1234.7	1357.6	1400.6
157.5°	1145.6	1174.1	1235.1	1331.7	1361.0
160°	1164.8	1190.2	1236.7	1317.1	1338.6
162.5°	1180.8	1203.1	1238.3	1304.2	1321.0
165°	1204.8	1220.4	1240.7	1288.9	1298.7
167.5°	1223.1	1232.5	1242.7	1279.5	1282.7
170°	1232.7	1240.5	1242.7	1274.7	1274.7
172.5°	1240.7	1245.4	1242.7	1268.3	1266.7
175°	1248.7	1250.7	1242.7	1260.6	1256.7
177.5°	1251.9	1250.3	1242.3	1253.4	1250.3
180°	1248.7	1248.7	1248.7	1248.7	1248.7

(END OF REPORT)