

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: P564956

Luminaire Tested: **SQ4-PW1-100U-100D-830-1D-UNV-STD-W-8**

Issue Date: 7/30/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P564956  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-23, 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-PW1-100U-100D-830-1D-UNV-STD-W-8  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE WAVES CONTINUOUS LENS.  
DOWNLIGHT 1000 LUMENS PER FOOT  
UPLIGHT 1000 LUMENS PER FOOT  
Light Source: 3000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

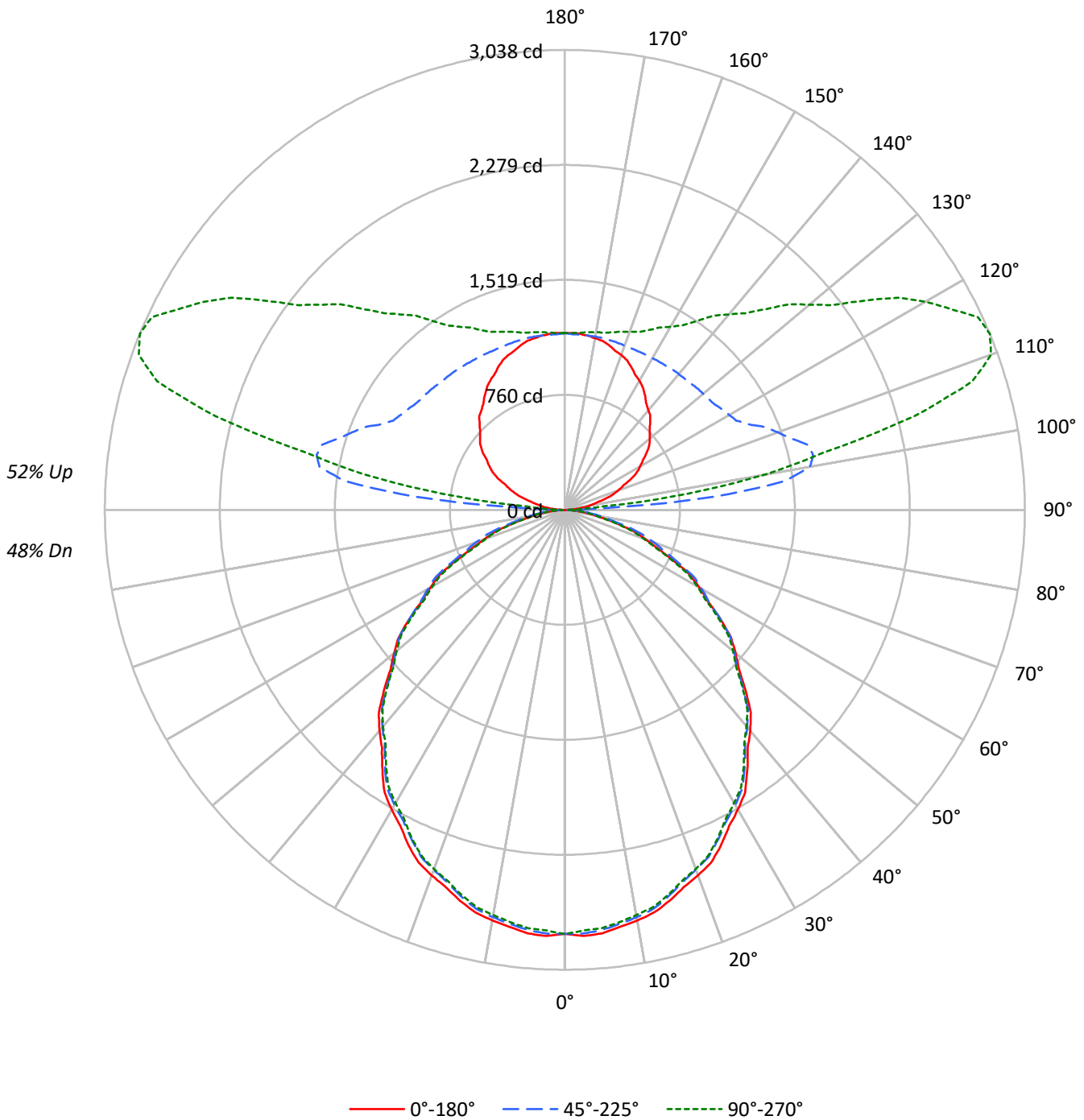
Lumens per Lamp: N/A  
Luminaire Lumens: 14712.2 lumens  
Efficiency: N/A  
Efficacy: 121.4 lumens/watt  
Spacing Criteria (0/90/45): 1.22 / 1.19 / 1.31  
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')  
CIE Type: General Diffuse

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	50	30	10	0	
RCR																						
0	107	107	107	107	98	98	98	98	82	82	82	68	68	68	55	55	55	48				48
1	98	93	89	86	90	86	83	80	72	70	68	60	58	57	49	47	46	41				41
2	89	82	75	70	82	75	70	66	64	60	56	53	50	48	43	41	39	35				35
3	81	72	64	59	74	66	60	55	56	51	47	47	43	40	38	36	33	29				29
4	74	63	56	50	68	59	52	47	50	45	40	42	38	35	34	31	29	25				25
5	68	57	48	43	62	52	45	40	45	39	35	37	33	30	31	28	25	22				22
6	63	51	43	37	58	47	40	35	40	35	30	34	30	26	28	25	22	19				19
7	58	46	38	32	53	43	35	30	36	31	27	31	26	23	25	22	20	17				17
8	54	42	34	29	49	39	32	27	33	28	24	28	24	21	23	20	18	15				15
9	50	38	30	25	46	35	29	24	30	25	21	26	22	19	21	18	16	14				14
10	47	35	28	23	43	32	26	22	28	23	19	24	20	17	20	17	14	12				12

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

	0°	45°	90°
0°	12924	12924	12924
5°	13008	12904	12847
10°	12904	12799	12730
15°	12767	12625	12578
20°	12614	12420	12396
25°	12438	12212	12174
30°	12175	11991	11912
35°	11829	11662	11593
40°	11460	11282	11238
45°	11014	10869	10821
50°	10558	10469	10398
55°	10065	10065	9906
60°	9451	9633	9292
65°	8648	9080	8433
70°	7623	8357	7424
75°	6511	7479	6335
80°	5050	6296	5114
85°	3266	4832	4314



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	263.8	1.8
10°-20°	744.8	5.1
20°-30°	1104.8	7.5
30°-40°	1292.7	8.8
40°-50°	1287.0	8.7
50°-60°	1111.3	7.6
60°-70°	800.0	5.4
70°-80°	419.5	2.9
80°-90°	106.4	0.7
90°-100°	546.5	3.7
100°-110°	1508.6	10.3
110°-120°	1555.9	10.6
120°-130°	1250.3	8.5
130°-140°	982.6	6.7
140°-150°	753.6	5.1
150°-160°	541.6	3.7
160°-170°	331.2	2.3
170°-180°	111.7	0.8
0°-30°	2113.4	14.4
0°-40°	3406.1	23.2
0°-60°	5804.4	39.5
0°-90°	7130.3	48.5
90°-120°	3611.0	24.5
90°-150°	6597.5	44.8
90°-180°	7582.0	51.5
0°-180°	14712.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2802	2802	2802	2802	2802	
5°	2809	2778	2787	2779	2774	266
15°	2673	2639	2644	2638	2634	753
25°	2444	2403	2399	2385	2392	1124
35°	2100	2072	2071	2051	2059	1313
45°	1688	1674	1666	1661	1659	1303
55°	1251	1249	1251	1234	1232	1117
65°	792	816	832	799	773	785
75°	365	399	420	392	355	392
85°	62	81	91	86	82	81
90°	4	7	15	17	19	8
95°	80	296	991	408	265	86
105°	269	415	1660	2534	2386	286
115°	482	582	1337	2646	3010	473
125°	661	752	1212	2051	2407	588
135°	795	881	1178	1661	1873	615
145°	922	986	1163	1414	1522	577
155°	1040	1075	1154	1269	1309	479
165°	1126	1140	1159	1204	1214	317
175°	1167	1169	1161	1178	1174	111
180°	1167	1167	1167	1167	1167	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2801.6	2801.6	2801.6	2801.6	2801.6
2.5°	2817.4	2794.2	2801.6	2795.3	2781.8
5°	2809.0	2777.6	2786.7	2779.2	2774.4
7.5°	2780.3	2751.4	2758.1	2750.1	2747.3
10°	2754.7	2725.7	2732.4	2722.5	2717.6
12.5°	2725.0	2694.1	2700.8	2690.9	2688.0
15°	2673.2	2639.4	2643.6	2638.5	2633.7
17.5°	2613.0	2578.7	2579.4	2571.5	2570.5
20°	2569.5	2533.3	2530.0	2520.3	2525.1
22.5°	2522.1	2484.0	2480.7	2467.0	2473.8
25°	2443.6	2402.6	2399.2	2384.6	2391.8
27.5°	2352.8	2312.3	2312.3	2291.8	2299.5
30°	2285.7	2247.1	2251.1	2226.7	2236.3
32.5°	2214.6	2179.8	2182.0	2157.5	2167.2
35°	2100.5	2071.6	2070.9	2051.3	2058.6
37.5°	1984.0	1958.5	1954.4	1943.1	1945.0
40°	1903.1	1881.4	1873.5	1866.1	1866.1
42.5°	1818.2	1798.4	1790.5	1785.1	1783.1
45°	1688.3	1673.9	1666.1	1661.1	1658.7
47.5°	1560.0	1546.5	1539.7	1536.2	1533.8
50°	1471.1	1461.5	1458.8	1451.3	1448.9
52.5°	1382.3	1376.5	1373.9	1364.4	1362.0
55°	1251.4	1249.0	1251.4	1234.1	1231.7
57.5°	1115.2	1119.1	1127.0	1103.7	1097.9
60°	1024.4	1034.0	1044.1	1016.7	1007.1
62.5°	931.5	947.0	961.2	929.8	916.2
65°	792.3	816.5	831.8	799.1	772.6
67.5°	658.1	688.0	706.4	671.2	641.3
70°	565.2	599.0	619.6	584.2	550.4
72.5°	484.3	521.9	538.6	505.2	471.5
75°	365.3	399.1	419.6	391.6	355.4
77.5°	259.2	291.0	308.0	283.7	253.7
80°	190.1	223.9	237.0	216.7	192.5
82.5°	134.8	162.8	171.8	159.6	143.2
85°	61.7	81.0	91.3	86.3	81.5
87.5°	16.5	30.8	40.5	40.9	43.2
90°	3.7	7.4	14.9	16.8	18.7
92.5°	33.6	139.5	249.4	91.0	70.9
95°	80.3	295.7	991.4	407.5	265.1
97.5°	132.9	331.2	1468.6	1130.7	818.9
100°	171.8	352.5	1644.9	1656.5	1346.1
102.5°	209.1	376.7	1679.2	2046.7	1752.4
105°	268.9	414.9	1659.8	2534.0	2386.1
107.5°	332.3	462.3	1567.2	2768.9	2823.0
110°	377.1	494.0	1495.5	2819.5	2994.7



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	417.5	529.9	1428.3	2779.6	3038.1
115°	481.7	582.1	1336.8	2646.4	3009.7
117.5°	537.7	637.8	1276.7	2459.0	2872.3
120°	575.1	673.6	1252.8	2332.1	2748.3
122.5°	610.9	705.1	1233.4	2213.6	2607.9
125°	660.9	752.2	1211.7	2050.6	2406.6
127.5°	703.5	794.8	1199.0	1912.9	2219.9
130°	731.9	823.2	1193.0	1828.6	2107.9
132.5°	758.8	845.7	1187.1	1757.8	2010.8
135°	795.4	881.2	1178.1	1660.9	1872.7
137.5°	836.4	914.6	1173.6	1579.5	1760.3
140°	858.8	935.5	1170.6	1525.3	1684.1
142.5°	884.2	955.1	1167.7	1477.0	1616.9
145°	922.3	986.2	1163.2	1413.9	1521.6
147.5°	958.9	1014.8	1159.1	1360.7	1444.3
150°	985.8	1031.4	1157.6	1329.0	1396.6
152.5°	1006.7	1049.4	1156.1	1301.9	1357.7
155°	1039.9	1074.6	1153.8	1268.6	1308.8
157.5°	1070.6	1097.2	1154.2	1244.5	1271.8
160°	1088.5	1112.2	1155.7	1230.8	1250.9
162.5°	1103.4	1124.2	1157.2	1218.8	1234.5
165°	1125.8	1140.4	1159.4	1204.5	1213.6
167.5°	1143.0	1151.8	1161.3	1195.7	1198.6
170°	1152.0	1159.3	1161.3	1191.2	1191.2
172.5°	1159.4	1163.8	1161.3	1185.2	1183.7
175°	1166.9	1168.7	1161.3	1178.0	1174.4
177.5°	1169.9	1168.4	1160.9	1171.3	1168.4
180°	1166.9	1166.9	1166.9	1166.9	1166.9

(END OF REPORT)