

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: P564668

Luminaire Tested: **SQ4-PW1-050U-100D-830-1D-UNV-STD-W-8**

Issue Date: 7/30/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P564668  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-21, 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-PW1-050U-100D-830-1D-UNV-STD-W-8  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE WAVES CONTINUOUS LENS.  
DOWNLIGHT 1000 LUMENS PER FOOT  
UPLIGHT 500 LUMENS PER FOOT  
Light Source: 3000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 10890.4 lumens  
Efficiency: N/A  
Efficacy: 114.2 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: Semi-Direct

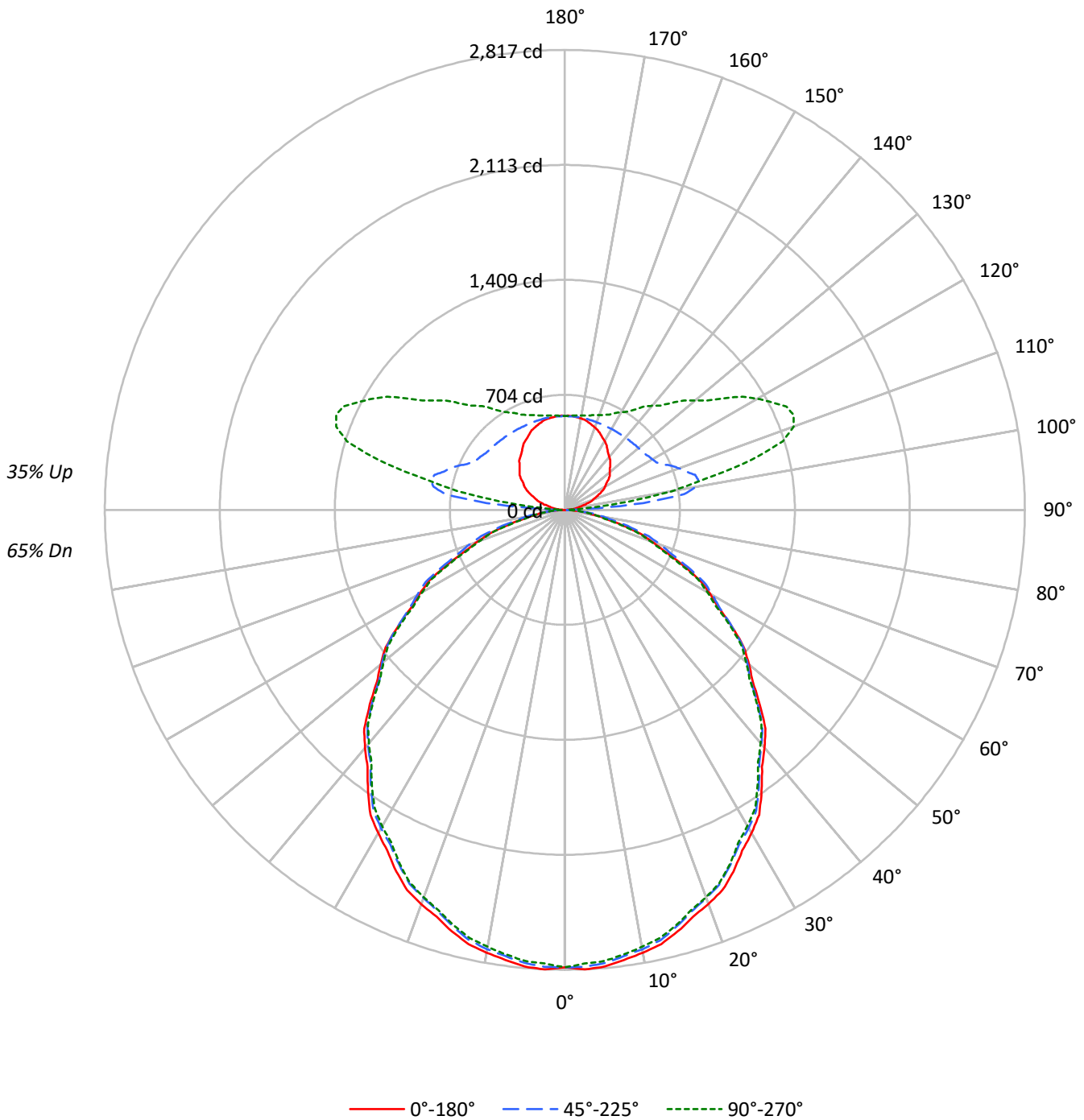
Input Watts (W): 95.4  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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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	111	111	111	111	104	104	104	104	92	92	92	81	81	81	70	70	70	65
1	101	97	93	90	95	91	88	85	81	78	76	71	69	68	62	61	60	55
2	92	85	79	73	87	80	75	70	71	67	63	63	59	57	55	53	50	47
3	84	75	67	61	79	71	64	59	63	58	53	56	51	48	49	46	43	40
4	77	66	58	52	72	63	55	50	56	50	45	50	45	41	44	40	37	34
5	71	59	51	45	67	56	48	43	50	44	39	45	40	36	39	36	32	30
6	66	53	45	39	61	50	43	37	45	39	34	40	35	31	36	32	29	26
7	61	48	40	34	57	46	38	33	41	35	30	37	32	28	33	29	25	23
8	56	44	36	30	53	42	34	29	38	31	27	34	29	25	30	26	23	21
9	53	40	32	27	49	38	31	26	34	29	24	31	26	22	28	24	21	19
10	49	37	29	24	46	35	28	24	32	26	22	29	24	20	26	22	19	17

**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	2.4
10°-20°	744.8	6.8
20°-30°	1104.8	10.1
30°-40°	1292.7	11.9
40°-50°	1287.0	11.8
50°-60°	1111.3	10.2
60°-70°	800.0	7.3
70°-80°	419.5	3.9
80°-90°	106.2	1.0
90°-100°	276.5	2.5
100°-110°	751.0	6.9
110°-120°	772.2	7.1
120°-130°	617.4	5.7
130°-140°	485.1	4.5
140°-150°	372.0	3.4
150°-160°	267.5	2.5
160°-170°	163.6	1.5
170°-180°	55.1	0.5
0°-30°	2113.4	19.4
0°-40°	3406.1	31.3
0°-60°	5804.4	53.3
0°-90°	7130.1	65.5
90°-120°	1799.7	16.5
90°-150°	3274.1	30.1
90°-180°	3760.0	34.5
0°-180°	10890.4	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°	2	7	13	17	17	5
95°	41	151	482	210	141	43
105°	133	208	826	1258	1183	142
115°	237	288	661	1315	1498	234
125°	326	371	598	1008	1189	291
135°	393	436	582	821	926	304
145°	454	486	574	698	750	285
155°	513	531	570	626	644	237
165°	556	563	572	596	598	157
175°	576	578	574	581	580	55
180°	576	576	576	576	576	

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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°	16.2	30.8	40.1	40.9	42.8
90°	1.9	7.3	13.0	16.7	16.7
92.5°	16.7	75.7	131.5	56.5	47.8
95°	40.7	151.2	481.5	209.5	140.7
97.5°	67.4	167.0	738.1	574.3	403.3
100°	85.2	177.5	816.7	827.8	668.5
102.5°	103.0	188.1	837.4	1023.8	883.3
105°	133.3	207.6	825.9	1257.5	1183.3
107.5°	164.8	230.4	778.1	1378.2	1398.9
110°	187.0	246.8	742.6	1402.0	1490.7

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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	206.3	263.1	707.0	1382.3	1515.9
115°	237.0	287.7	661.1	1315.2	1498.1
117.5°	265.9	314.4	631.8	1220.2	1426.3
120°	285.2	332.3	618.5	1156.5	1361.1
122.5°	301.5	348.6	609.6	1092.6	1290.0
125°	325.9	371.2	598.1	1007.8	1188.9
127.5°	347.8	392.7	591.8	943.5	1098.9
130°	361.1	404.6	588.9	903.2	1042.6
132.5°	374.4	417.9	585.9	868.7	992.2
135°	392.6	436.0	581.5	820.9	925.9
137.5°	412.2	451.7	579.2	778.7	867.0
140°	424.1	462.1	577.8	751.8	831.5
142.5°	435.9	471.0	576.3	730.8	797.4
145°	453.7	486.3	574.1	697.5	750.0
147.5°	473.7	501.6	572.2	671.3	712.6
150°	487.0	510.6	572.2	656.3	688.9
152.5°	497.4	518.0	570.7	642.8	669.6
155°	513.0	531.1	570.4	626.3	644.4
157.5°	528.1	542.3	570.4	615.1	628.9
160°	537.0	549.7	570.4	607.6	618.5
162.5°	545.9	555.7	571.8	601.7	609.6
165°	555.5	562.8	572.2	596.3	598.1
167.5°	565.5	569.2	574.1	590.0	591.5
170°	568.5	572.1	574.1	587.0	587.0
172.5°	571.5	573.6	574.1	584.1	584.1
175°	575.9	577.7	574.1	581.4	579.6
177.5°	577.4	577.4	573.0	578.8	575.9
180°	575.9	575.9	575.9	575.9	575.9

(END OF REPORT)