

Scaled data based on original data using  
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State  
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: CORELITE

Report Number: P845164

Luminaire Tested: **SQ4P-PR1-050U-100D-B50-1D-UNV**

Issue Date: 8/14/2023



**Test Information**

Test Method: LM-79-08  
Report Number: P845164  
REPORT IS A COMBINATION OF REPORTS P700205 AND P700244  
Test Lab: INNOVATION CENTER  
Issue Date: 8/14/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: SQ4P-PR1-050U-100D-B50-1D-UNV  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, 500 LUMENS PER FOOT UPLIGHT, 1000 LUMENS PER FOOT DOWNLIGHT  
  
Light Source: -  
Ballast/Driver: -

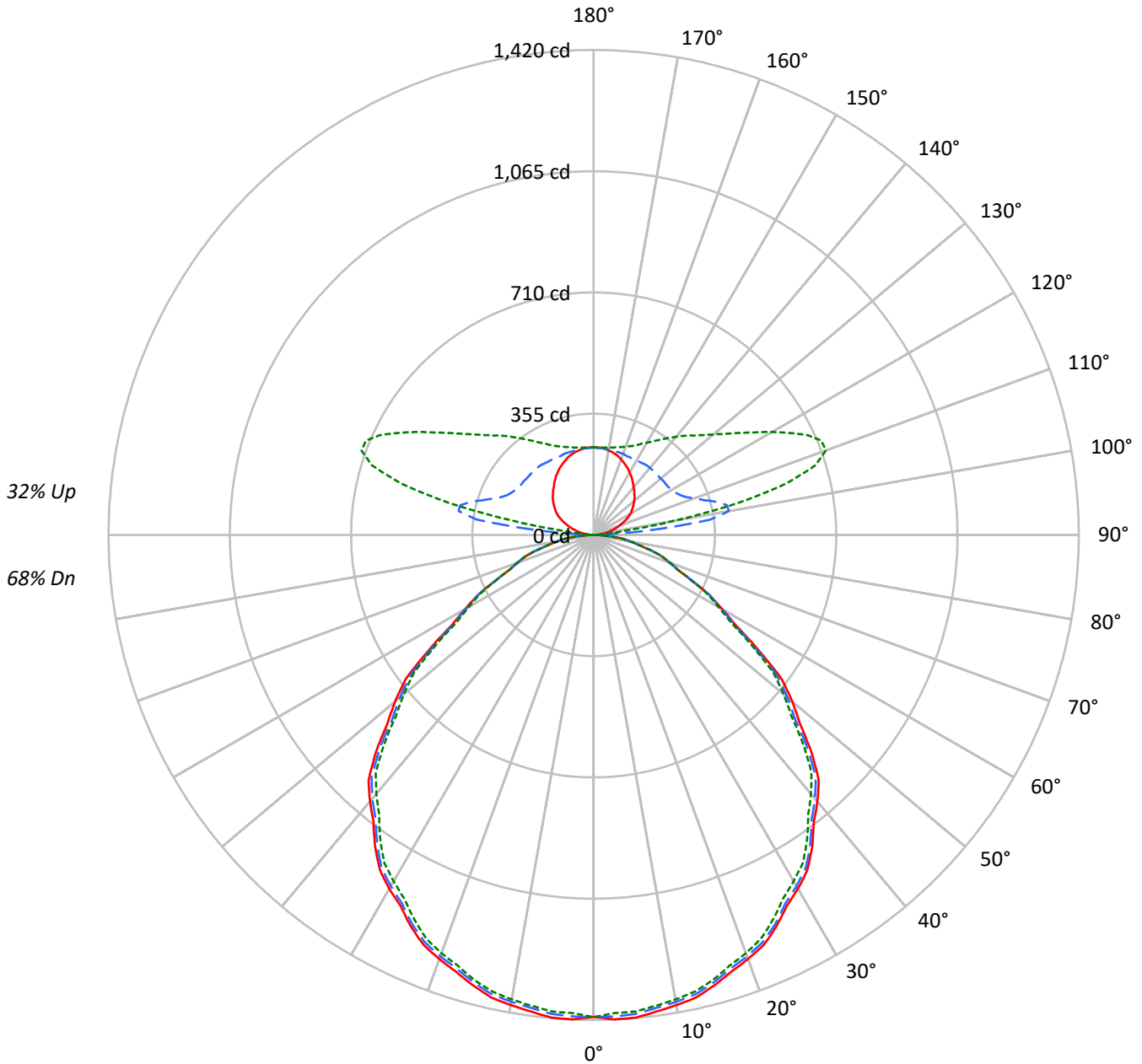
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5192.6 lumens  
Efficiency: N/A  
Efficacy: 108.4 lumens/watt  
Spacing Criteria (0/90/45): 1.26 / 1.24 / 1.35  
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')  
CIE Type: Semi-Direct  
  
Input Watts (W): 47.9  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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: 25 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				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	105	105	105	105	93	93	93	83	83	83	73	73	73	68				68
1	102	98	94	91	96	93	89	86	83	80	78	73	71	70	65	63	62	58				58
2	93	86	80	75	88	81	76	71	73	69	65	65	62	59	58	55	53	49				49
3	85	76	69	63	80	72	65	60	65	59	55	58	54	50	51	48	45	42				42
4	78	68	60	53	74	64	57	51	58	52	47	52	47	43	46	42	39	36				36
5	72	60	52	46	68	57	50	44	52	46	41	47	42	38	42	38	35	32				32
6	67	54	46	40	63	52	44	39	47	41	36	42	37	33	38	34	31	28				28
7	62	49	41	36	58	47	40	34	43	36	32	39	33	30	35	30	27	25				25
8	57	45	37	32	54	43	36	31	39	33	29	35	30	27	32	28	25	22				22
9	54	41	33	28	51	39	32	27	36	30	26	33	28	24	29	25	22	20				20
10	50	38	30	26	47	36	29	25	33	27	23	30	25	22	27	23	20	18				18

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

	0°	45°	90°
0°	13021	13021	13021
5°	13138	13038	12970
10°	13096	13005	12937
15°	13040	12958	12888
20°	12974	12889	12794
25°	12882	12797	12648
30°	12743	12653	12472
35°	12556	12445	12268
40°	12268	12137	11916
45°	11770	11562	11326
50°	10889	10626	10415
55°	9502	9289	9093
60°	8006	7942	7783
65°	6925	6953	6899
70°	6358	6393	6393
75°	6110	6110	6156
80°	5749	5813	5749
85°	4637	5145	5145



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	133.5	2.6
10°-20°	381.9	7.4
20°-30°	576.0	11.1
30°-40°	686.3	13.2
40°-50°	676.6	13.0
50°-60°	517.1	10.0
60°-70°	319.9	6.2
70°-80°	181.7	3.5
80°-90°	55.9	1.1
90°-100°	102.0	2.0
100°-110°	355.0	6.8
110°-120°	343.9	6.6
120°-130°	269.8	5.2
130°-140°	213.5	4.1
140°-150°	164.8	3.2
150°-160°	118.1	2.3
160°-170°	72.3	1.4
170°-180°	24.4	0.5
0°-30°	1091.3	21.0
0°-40°	1777.5	34.2
0°-60°	2971.2	57.2
0°-90°	3528.8	68.0
90°-120°	800.9	15.4
90°-150°	1449.0	27.9
90°-180°	1664.0	32.0
0°-180°	5192.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1411	1411	1411	1411	1411	
5°	1419	1403	1408	1403	1400	135
15°	1365	1351	1357	1352	1349	385
25°	1265	1250	1257	1244	1242	582
35°	1115	1102	1105	1090	1089	696
45°	902	890	886	870	868	691
55°	591	581	578	568	565	529
65°	317	315	318	316	316	321
75°	171	171	171	173	173	181
85°	44	46	49	49	49	51
90°	4	6	6	4	2	4
95°	17	59	172	44	27	18
105°	59	84	373	629	585	62
115°	103	124	277	585	691	102
125°	140	172	258	436	520	125
135°	168	189	256	364	411	130
145°	197	210	254	314	340	123
155°	224	232	251	279	289	103
165°	245	247	253	264	266	69
175°	256	256	254	258	256	24
180°	256	256	256	256	256	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1411.3	1411.3	1411.3	1411.3	1411.3
2.5°	1420.1	1407.8	1411.3	1408.3	1401.7
5°	1418.6	1403.1	1407.8	1402.7	1400.4
7.5°	1407.8	1392.4	1397.1	1392.1	1390.8
10°	1397.9	1383.7	1388.2	1383.4	1380.9
12.5°	1387.2	1372.2	1377.6	1371.7	1369.4
15°	1365.2	1350.9	1356.6	1351.8	1349.3
17.5°	1340.9	1325.6	1331.5	1325.8	1322.6
20°	1321.4	1307.1	1312.8	1304.5	1303.1
22.5°	1300.0	1285.8	1291.4	1280.1	1279.9
25°	1265.4	1249.9	1257.1	1243.6	1242.4
27.5°	1224.4	1210.1	1215.8	1202.2	1200.9
30°	1196.1	1181.8	1187.7	1173.1	1170.7
32.5°	1164.0	1150.8	1155.7	1141.0	1139.5
35°	1114.8	1101.6	1104.9	1090.4	1089.2
37.5°	1058.7	1046.7	1048.6	1032.5	1031.4
40°	1018.6	1006.9	1007.7	990.8	989.4
42.5°	975.1	963.1	962.0	945.1	943.8
45°	902.1	890.1	886.1	870.2	868.0
47.5°	818.9	806.9	799.6	786.7	784.9
50°	758.6	746.6	740.3	729.3	725.6
52.5°	693.4	681.5	676.2	666.1	662.6
55°	590.7	581.3	577.5	567.7	565.3
57.5°	493.2	487.0	485.7	476.3	475.3
60°	433.9	430.4	430.4	421.8	421.8
62.5°	383.5	380.7	382.6	377.0	376.1
65°	317.2	314.9	318.5	316.0	316.0
67.5°	265.0	265.0	267.1	266.1	266.1
70°	235.7	235.7	237.0	237.0	237.0
72.5°	209.5	208.7	211.8	211.6	210.8
75°	171.4	171.4	171.4	172.7	172.7
77.5°	133.5	133.7	134.7	134.5	133.5
80°	108.2	109.4	109.4	108.2	108.2
82.5°	83.0	84.1	84.1	83.8	83.0
85°	43.8	46.1	48.6	48.6	48.6
87.5°	12.6	16.4	19.5	19.5	18.5
90°	3.8	5.7	5.7	3.8	1.9
92.5°	9.5	28.7	26.8	11.5	9.5
95°	17.2	59.3	172.2	44.0	26.8
97.5°	26.8	66.9	344.3	156.9	84.2
100°	36.4	70.8	401.8	376.9	243.0
102.5°	47.8	76.5	399.9	529.9	436.2
105°	59.3	84.2	373.1	629.4	585.4



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	91.9	112.9	290.8	633.3	721.3
115°	103.3	124.3	277.4	585.4	690.6
117.5°	114.8	137.8	269.7	541.4	646.6
120°	124.3	149.2	264.0	499.3	602.6
122.5°	132.0	160.7	260.2	464.9	558.6
125°	139.7	172.2	258.3	436.2	520.4
127.5°	147.3	179.8	258.3	415.2	485.9
130°	155.0	183.6	256.4	394.1	457.3
132.5°	162.6	185.5	256.4	378.8	432.4
135°	168.3	189.4	256.4	363.5	411.4
137.5°	176.0	193.3	256.4	350.1	394.1
140°	181.7	199.0	256.4	336.7	375.0
142.5°	189.4	204.7	256.4	323.3	357.8
145°	197.1	210.5	254.5	313.8	340.5
147.5°	204.7	216.2	252.6	304.2	325.2
150°	210.5	221.9	252.6	294.7	311.9
152.5°	218.1	227.6	250.7	285.0	300.4
155°	223.8	231.5	250.7	279.3	288.8
157.5°	229.5	237.2	250.7	273.6	281.2
160°	235.3	241.1	252.6	269.7	275.5
162.5°	241.1	244.9	252.6	265.9	269.7
165°	244.9	246.8	252.6	264.0	265.9
167.5°	248.7	250.7	252.6	262.1	262.1
170°	250.7	252.6	254.5	260.2	260.2
172.5°	254.5	254.5	254.5	258.3	258.3
175°	256.4	256.4	254.5	258.3	256.4
177.5°	256.4	256.4	254.5	258.3	256.4
180°	256.4	256.4	256.4	256.4	256.4



Report Generated By 670246072 / DESKTOP-50001EG







— 0°-180°    - - 45°-225°    - - - - 90°-270°







107.5°	70.8	93.8	338.6	673.5	681.1
110°	80.4	103.3	311.9	667.7	723.2



(END OF REPORT)