

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: P844900

Luminaire Tested: **SQ4P-F-025U-100D-B50-1D-UNV**

Issue Date: 8/14/2023

**Test Information**

Test Method: LM-79-08  
Report Number: P844900  
REPORT IS A COMBINATION OF REPORTS P700165 AND P700243  
Test Lab: INNOVATION CENTER  
Issue Date: 8/14/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: SQ4P-F-025U-100D-B50-1D-UNV  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, 250 LUMENS PER FOOT UPLIGHT, 1000 LUMENS PER FOOT DOWNLIGHT  
  
Light Source: -  
Ballast/Driver: -

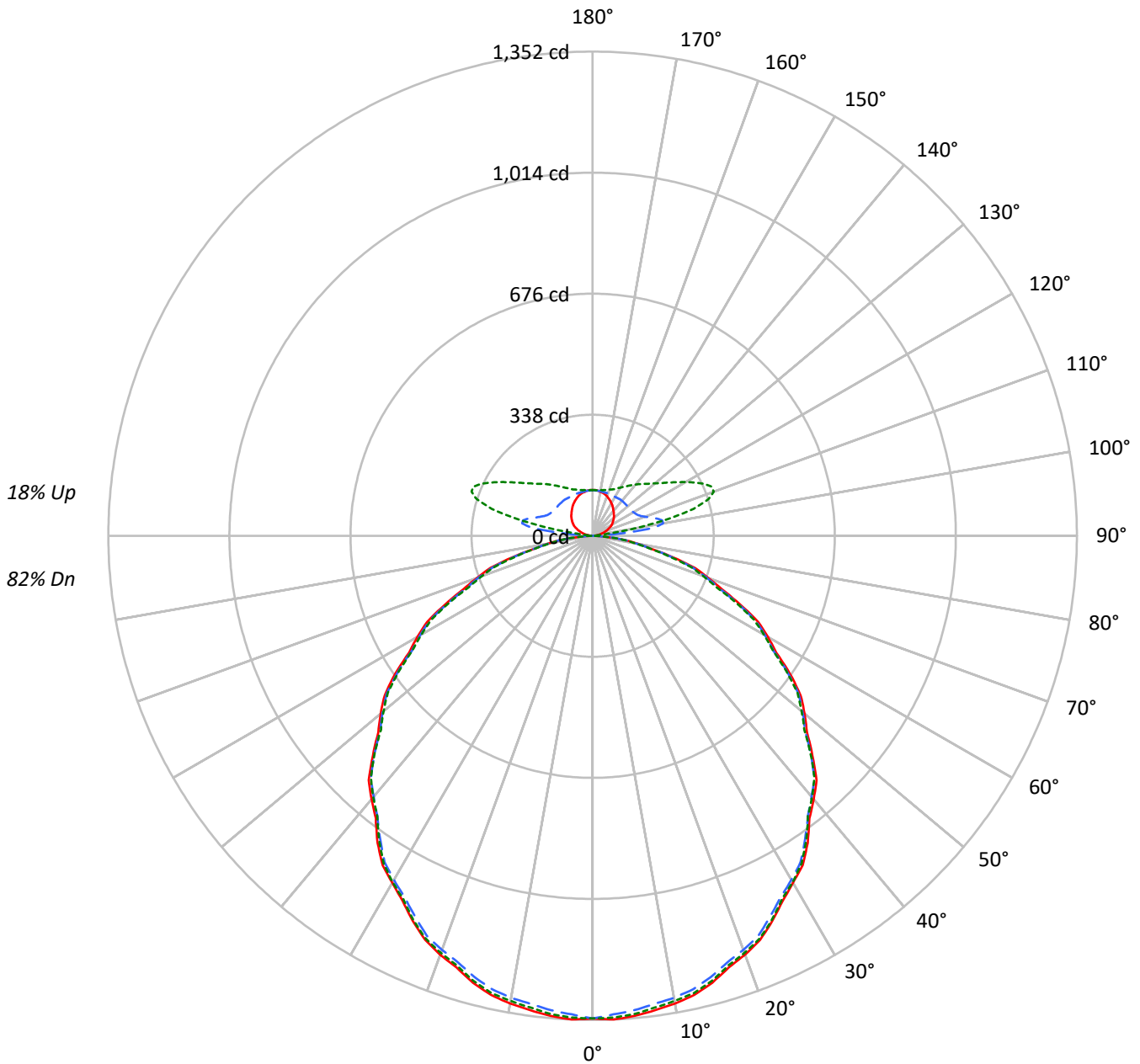
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4506.9 lumens  
Efficiency: N/A  
Efficacy: 107.6 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35  
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')  
CIE Type: Semi-Direct

Input Watts (W): 41.9  
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	115	115	115	115	110	110	110	110	101	101	101	93	93	93	85	85	85	85	85	85	82
1	105	100	96	93	100	96	93	89	89	86	83	82	79	77	75	74	72	72	72	72	69
2	95	88	81	75	91	84	78	73	78	73	69	72	68	64	66	63	60	60	60	60	57
3	87	77	69	63	83	74	67	61	68	63	58	63	58	54	58	55	51	51	51	51	48
4	80	68	60	53	76	66	58	52	61	54	49	56	51	47	52	48	44	44	44	44	41
5	73	61	52	46	70	59	51	45	54	48	42	51	45	40	47	42	38	38	38	38	36
6	68	55	46	40	64	53	45	39	49	42	37	46	40	35	43	38	34	34	34	34	31
7	63	49	41	35	60	48	40	34	45	38	33	42	36	31	39	34	30	30	30	30	28
8	58	45	37	31	56	44	36	31	41	34	29	38	32	28	36	31	27	27	27	27	25
9	54	41	33	28	52	40	33	27	37	31	26	35	29	25	33	28	24	24	24	24	22
10	51	38	30	25	49	37	30	25	35	28	24	33	27	23	31	26	22	22	22	22	20

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

	0°	45°	90°
0°	12435	12435	12435
5°	12467	12317	12416
10°	12424	12272	12356
15°	12339	12183	12288
20°	12222	12081	12170
25°	12085	11939	12050
30°	11917	11821	11898
35°	11789	11646	11705
40°	11563	11451	11474
45°	11324	11230	11230
50°	11085	10980	10930
55°	10827	10681	10623
60°	10422	10256	10189
65°	9927	9728	9608
70°	9247	9050	8859
75°	8295	8038	7846
80°	6711	6626	6424
85°	3991	4594	4764



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	127.2	2.8
10°-20°	362.1	8.0
20°-30°	543.9	12.1
30°-40°	649.3	14.4
40°-50°	665.4	14.8
50°-60°	593.4	13.2
60°-70°	441.9	9.8
70°-80°	239.9	5.3
80°-90°	55.8	1.2
90°-100°	50.8	1.1
100°-110°	176.7	3.9
110°-120°	171.2	3.8
120°-130°	134.2	3.0
130°-140°	106.3	2.4
140°-150°	82.0	1.8
150°-160°	58.8	1.3
160°-170°	36.0	0.8
170°-180°	12.2	0.3
0°-30°	1033.2	22.9
0°-40°	1682.5	37.3
0°-60°	2941.3	65.3
0°-90°	3678.9	81.6
90°-120°	398.6	8.8
90°-150°	721.1	16.0
90°-180°	828.0	18.4
0°-180°	4506.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1348	1348	1348	1348	1348	
5°	1346	1344	1330	1342	1341	128
15°	1292	1288	1276	1286	1286	364
25°	1187	1184	1173	1180	1184	547
35°	1047	1043	1034	1034	1039	653
45°	868	870	861	859	861	670
55°	673	673	664	659	660	600
65°	455	453	446	440	440	450
75°	233	231	226	222	220	246
85°	38	41	43	45	45	53
90°	2	3	3	2	1	2
95°	9	30	86	22	13	9
105°	30	42	186	313	291	31
115°	51	62	138	291	344	51
125°	70	86	128	217	259	62
135°	84	94	128	181	205	65
145°	98	105	127	156	170	61
155°	111	115	125	139	144	51
165°	122	123	126	131	132	34
175°	128	128	127	128	128	12
180°	128	128	128	128	128	



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CATALOG NUMBER: SQ4P-F-025U-100D-B50-1D-UNV

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1347.8	1347.8	1347.8	1347.8	1347.8
2.5°	1352.0	1349.3	1337.7	1347.8	1346.5
5°	1346.1	1344.3	1329.9	1342.4	1340.6
7.5°	1336.2	1332.8	1318.6	1330.9	1329.0
10°	1326.1	1322.6	1309.9	1320.6	1318.9
12.5°	1313.2	1311.1	1297.0	1307.8	1307.3
15°	1291.8	1288.2	1275.5	1286.5	1286.5
17.5°	1263.8	1261.6	1249.2	1259.5	1258.5
20°	1244.8	1241.4	1230.5	1239.5	1239.5
22.5°	1221.8	1219.7	1209.0	1216.4	1217.8
25°	1187.1	1183.7	1172.8	1180.1	1183.7
27.5°	1149.0	1146.2	1137.2	1141.9	1144.3
30°	1118.6	1118.6	1109.6	1111.5	1116.8
32.5°	1091.3	1091.3	1080.7	1082.6	1085.2
35°	1046.7	1043.0	1034.0	1034.0	1039.2
37.5°	994.4	992.8	987.1	986.0	987.4
40°	960.1	958.2	950.8	952.7	952.7
42.5°	925.4	923.5	916.0	913.8	916.5
45°	867.9	869.8	860.7	858.8	860.7
47.5°	811.4	811.4	804.1	799.0	801.7
50°	772.3	772.3	765.0	761.5	761.5
52.5°	731.8	733.2	724.4	719.6	721.1
55°	673.1	673.1	664.0	658.7	660.4
57.5°	608.0	608.0	599.1	593.7	596.8
60°	564.8	564.8	555.8	550.3	552.2
62.5°	521.4	521.4	512.6	507.1	507.3
65°	454.7	453.0	445.6	440.1	440.1
67.5°	390.4	385.8	380.3	373.2	373.2
70°	342.8	340.9	335.5	328.4	328.4
72.5°	299.5	296.3	290.8	285.1	285.1
75°	232.7	230.8	225.5	222.0	220.1
77.5°	166.8	165.3	164.9	159.8	161.3
80°	126.3	126.3	124.7	120.9	120.9
82.5°	90.2	91.6	88.4	87.6	86.2
85°	37.7	41.3	43.4	45.0	45.0
87.5°	7.3	11.3	10.1	11.6	11.6
90°	1.9	2.9	2.9	1.9	1.0
92.5°	4.8	14.3	13.3	5.7	4.8
95°	8.6	29.5	85.7	21.9	13.3
97.5°	13.3	33.3	171.4	78.1	41.9
100°	18.1	35.2	199.9	187.5	120.9
102.5°	23.8	38.1	199.0	263.7	217.1
105°	29.5	41.9	185.6	313.3	291.4



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	45.7	56.2	144.7	315.2	359.0
115°	51.4	61.9	138.0	291.4	343.8
117.5°	57.1	68.5	134.2	269.4	321.9
120°	61.9	74.3	131.4	248.5	300.0
122.5°	65.7	80.0	129.5	231.3	278.1
125°	69.5	85.7	128.5	217.1	259.0
127.5°	73.3	89.5	128.5	206.6	241.8
130°	77.1	91.4	127.6	196.1	227.5
132.5°	80.9	92.3	127.6	188.5	215.2
135°	83.8	94.3	127.6	180.9	204.7
137.5°	87.6	96.2	127.6	174.2	196.1
140°	90.4	99.0	127.6	167.6	186.6
142.5°	94.3	101.9	127.6	160.9	178.0
145°	98.1	104.7	126.6	156.1	169.5
147.5°	101.9	107.6	125.7	151.4	161.8
150°	104.7	110.4	125.7	146.6	155.2
152.5°	108.5	113.3	124.7	141.9	149.5
155°	111.4	115.2	124.7	139.0	143.8
157.5°	114.2	118.1	124.7	136.1	139.9
160°	117.1	120.0	125.7	134.2	137.1
162.5°	120.0	121.9	125.7	132.3	134.2
165°	121.9	122.8	125.7	131.4	132.3
167.5°	123.8	124.7	125.7	130.4	130.4
170°	124.7	125.7	126.6	129.5	129.5
172.5°	126.6	126.6	126.6	128.5	128.5
175°	127.6	127.6	126.6	128.5	127.6
177.5°	127.6	127.6	126.6	128.5	127.6
180°	127.6	127.6	127.6	127.6	127.6



Report Generated By 670246072 / DESKTOP-50001EG







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







107.5°	35.2	46.6	168.5	335.2	339.0
110°	40.0	51.4	155.2	332.4	360.0



(END OF REPORT)