

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: P844921

Luminaire Tested: **SQ4P-F-075U-075D-B50-1D-UNV**

Issue Date: 8/14/2023



**Test Information**

Test Method: LM-79-08  
Report Number: P844921  
REPORT IS A COMBINATION OF REPORTS P700220 AND P700245  
Test Lab: INNOVATION CENTER  
Issue Date: 8/14/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: SQ4P-F-075U-075D-B50-1D-UNV  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, 750 LUMENS PER FOOT UPLIGHT, 750 LUMENS PER FOOT DOWNLIGHT  
  
Light Source: -  
Ballast/Driver: -

**Summary**

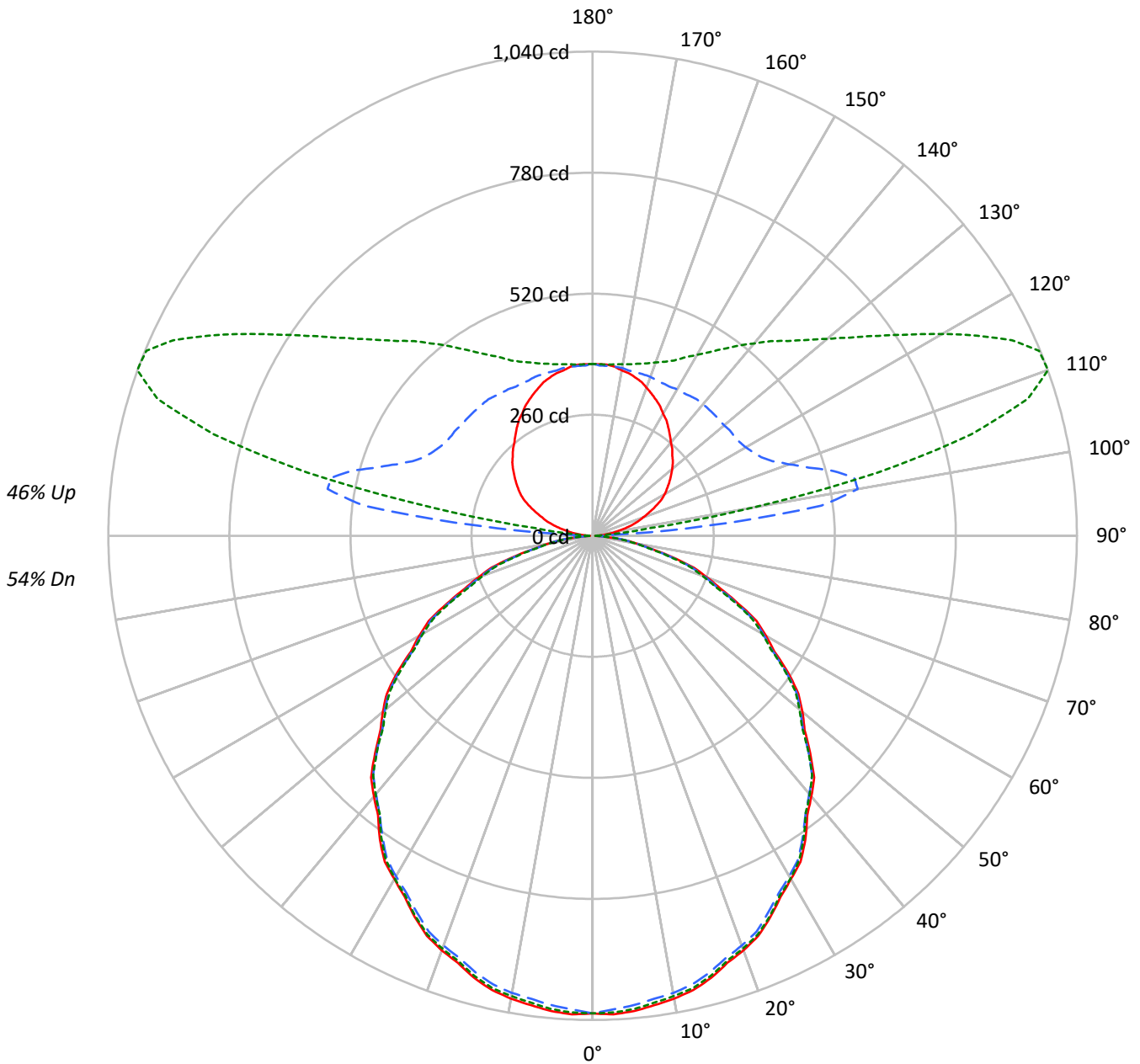
Lumens per Lamp: N/A  
Luminaire Lumens: 5194.5 lumens  
Efficiency: N/A  
Efficacy: 116.5 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35  
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')  
CIE Type: General Diffuse

Input Watts (W): 44.6  
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									
RC	80									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	108	108	108	108	100	100	100	100	86	86	86	72	72	72	60	60	60	54																			
1	99	94	90	87	91	88	84	81	75	72	70	63	62	60	53	52	50	45																			
2	90	82	76	71	83	76	71	66	66	62	58	56	53	50	46	44	42	38																			
3	82	72	65	59	76	67	61	55	58	53	49	49	45	42	41	38	36	32																			
4	75	64	56	50	69	59	52	47	51	46	41	44	39	36	37	33	31	27																			
5	69	57	49	43	63	53	46	40	46	40	36	39	35	31	33	29	27	24																			
6	63	51	43	37	58	48	40	35	41	35	31	35	31	27	30	26	24	21																			
7	58	46	38	32	54	43	36	31	37	32	27	32	27	24	27	24	21	18																			
8	54	42	34	29	50	39	32	27	34	28	24	29	25	21	25	21	19	16																			
9	50	38	31	25	47	36	29	24	31	26	22	27	22	19	23	19	17	15																			
10	47	35	28	23	44	33	26	22	29	23	20	25	21	17	21	18	15	13																			

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

	0°	45°	90°
0°	9464	9464	9464
5°	9489	9374	9450
10°	9456	9340	9405
15°	9392	9274	9353
20°	9303	9196	9264
25°	9199	9087	9172
30°	9071	8997	9055
35°	8973	8864	8909
40°	8802	8716	8734
45°	8618	8548	8548
50°	8437	8359	8319
55°	8241	8130	8086
60°	7933	7805	7756
65°	7556	7405	7313
70°	7041	6887	6741
75°	6313	6121	5971
80°	5111	5042	4888
85°	3038	3493	3631



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	96.8	1.9
10°-20°	275.6	5.3
20°-30°	414.0	8.0
30°-40°	494.2	9.5
40°-50°	506.4	9.7
50°-60°	451.6	8.7
60°-70°	336.3	6.5
70°-80°	182.6	3.5
80°-90°	43.2	0.8
90°-100°	146.8	2.8
100°-110°	510.8	9.8
110°-120°	494.8	9.5
120°-130°	388.1	7.5
130°-140°	307.2	5.9
140°-150°	237.1	4.6
150°-160°	169.9	3.3
160°-170°	103.9	2.0
170°-180°	35.2	0.7
0°-30°	786.4	15.1
0°-40°	1280.6	24.7
0°-60°	2238.7	43.1
0°-90°	2800.8	53.9
90°-120°	1152.3	22.2
90°-150°	2084.7	40.1
90°-180°	2394.0	46.1
0°-180°	5194.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1026	1026	1026	1026	1026	
5°	1025	1023	1012	1022	1020	97
15°	983	980	971	979	979	277
25°	904	901	893	898	901	416
35°	797	794	787	787	791	497
45°	660	662	655	654	655	510
55°	512	512	505	501	503	456
65°	346	345	339	335	335	343
75°	177	176	172	169	168	187
85°	29	31	33	34	34	40
90°	6	8	8	6	3	4
95°	25	85	248	63	39	26
105°	85	121	537	906	842	90
115°	149	179	399	842	994	147
125°	201	248	372	628	749	180
135°	242	272	369	523	592	188
145°	284	303	366	452	490	177
155°	322	333	360	402	416	148
165°	352	355	363	380	383	99
175°	369	369	366	372	369	35
180°	369	369	369	369	369	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1025.8	1025.8	1025.8	1025.8	1025.8
2.5°	1029.0	1026.9	1018.2	1025.8	1024.9
5°	1024.6	1023.1	1012.2	1021.7	1020.4
7.5°	1017.0	1014.5	1003.5	1013.0	1011.6
10°	1009.3	1006.6	997.0	1005.1	1003.9
12.5°	999.5	997.9	987.2	995.4	995.1
15°	983.3	980.5	970.9	979.2	979.2
17.5°	961.9	960.3	950.8	958.7	957.9
20°	947.5	944.9	936.6	943.5	943.5
22.5°	930.0	928.4	920.2	925.8	927.0
25°	903.6	901.0	892.6	898.2	901.0
27.5°	874.5	872.4	865.6	869.1	871.0
30°	851.5	851.5	844.5	846.0	850.0
32.5°	830.6	830.6	822.6	824.1	826.0
35°	796.7	793.9	787.0	787.0	791.0
37.5°	756.9	755.6	751.2	750.5	751.6
40°	730.8	729.3	723.7	725.2	725.2
42.5°	704.3	702.9	697.3	695.5	697.5
45°	660.5	661.9	655.1	653.7	655.1
47.5°	617.6	617.6	612.0	608.2	610.2
50°	587.8	587.8	582.4	579.6	579.6
52.5°	557.0	558.1	551.4	547.7	548.8
55°	512.3	512.3	505.4	501.3	502.7
57.5°	462.8	462.8	456.0	451.8	454.2
60°	429.9	429.9	423.0	418.8	420.3
62.5°	396.9	396.9	390.1	386.0	386.1
65°	346.1	344.8	339.2	335.0	335.0
67.5°	297.1	293.6	289.5	284.0	284.0
70°	261.0	259.5	255.3	249.9	249.9
72.5°	227.9	225.5	221.3	217.1	217.1
75°	177.1	175.6	171.7	169.0	167.5
77.5°	126.9	125.9	125.5	121.7	122.8
80°	96.2	96.2	94.9	92.0	92.0
82.5°	68.6	69.7	67.3	66.6	65.6
85°	28.7	31.4	33.0	34.3	34.3
87.5°	5.6	8.7	7.7	8.9	8.9
90°	5.5	8.3	8.3	5.5	2.8
92.5°	13.8	41.3	38.6	16.5	13.8
95°	24.8	85.3	247.7	63.3	38.6
97.5°	38.6	96.3	495.4	225.7	121.1
100°	52.3	101.9	578.0	542.3	349.6
102.5°	68.8	110.1	575.3	762.5	627.6
105°	85.3	121.1	536.8	905.6	842.3



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	132.1	162.4	418.4	911.1	1037.7
115°	148.6	178.9	399.1	842.3	993.6
117.5°	165.2	198.2	388.1	778.9	930.3
120°	178.9	214.7	379.9	718.4	867.0
122.5°	189.9	231.2	374.3	668.9	803.7
125°	201.0	247.7	371.6	627.6	748.7
127.5°	211.9	258.8	371.6	597.3	699.2
130°	223.0	264.3	368.8	567.0	657.8
132.5°	233.9	266.9	368.8	545.0	622.1
135°	242.2	272.5	368.8	522.9	591.8
137.5°	253.2	278.0	368.8	503.7	567.0
140°	261.5	286.3	368.8	484.4	539.5
142.5°	272.5	294.6	368.8	465.2	514.7
145°	283.5	302.7	366.1	451.5	489.9
147.5°	294.6	311.0	363.3	437.6	467.9
150°	302.7	319.3	363.3	423.8	448.7
152.5°	313.8	327.5	360.5	410.1	432.1
155°	322.1	333.0	360.5	401.8	415.7
157.5°	330.3	341.3	360.5	393.6	404.6
160°	338.5	346.8	363.3	388.1	396.3
162.5°	346.8	352.3	363.3	382.6	388.1
165°	352.3	355.1	363.3	379.9	382.6
167.5°	357.9	360.5	363.3	377.1	377.1
170°	360.5	363.3	366.1	374.3	374.3
172.5°	366.1	366.1	366.1	371.6	371.6
175°	368.8	368.8	366.1	371.6	368.8
177.5°	368.8	368.8	366.1	371.6	368.8
180°	368.8	368.8	368.8	368.8	368.8



Report Generated By 670246072 / DESKTOP-50001EG







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







107.5°	101.9	134.9	487.2	968.9	979.9
110°	115.6	148.6	448.7	960.6	1040.5



(END OF REPORT)