

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: P845173

Luminaire Tested: **SQ4P-PR1-075U-075D-B50-1D-UNV**

Issue Date: 8/14/2023



**Test Information**

Test Method: LM-79-08  
Report Number: P845173  
REPORT IS A COMBINATION OF REPORTS P700232 AND P700245  
Test Lab: INNOVATION CENTER  
Issue Date: 8/14/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: SQ4P-PR1-075U-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**

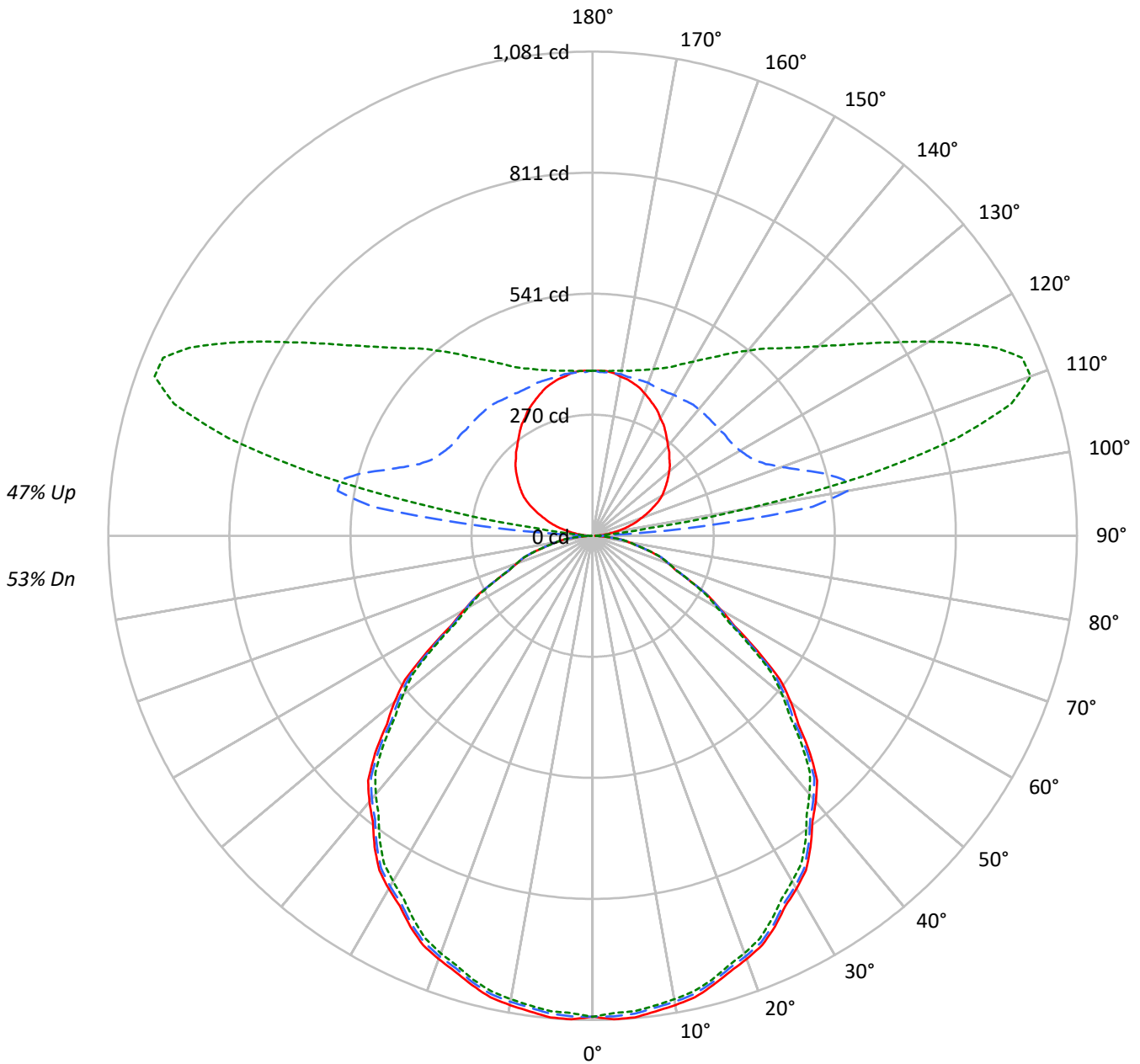
Lumens per Lamp: N/A  
Luminaire Lumens: 5079.3 lumens  
Efficiency: N/A  
Efficacy: 113.9 lumens/watt  
Spacing Criteria (0/90/45): 1.26 / 1.24 / 1.35  
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')  
CIE Type: General Diffuse

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	85	85	85	71	71	71	59	59	59	53																			
1	99	94	91	87	91	88	84	81	75	73	70	63	62	60	52	51	50	45																			
2	90	83	77	72	83	77	72	67	66	62	59	56	53	51	46	45	43	38																			
3	82	73	66	60	76	68	62	57	58	54	50	50	46	43	41	39	37	33																			
4	76	65	57	51	70	60	54	48	52	47	43	44	40	37	37	34	32	28																			
5	69	58	50	44	64	54	47	42	47	41	37	40	36	32	34	30	28	25																			
6	64	52	44	38	59	49	41	36	42	37	32	36	32	28	31	27	25	22																			
7	59	47	39	34	55	44	37	32	38	33	29	33	29	25	28	25	22	19																			
8	55	43	35	30	51	40	33	28	35	29	25	30	26	23	26	22	20	17																			
9	51	39	32	27	47	37	30	25	32	27	23	28	23	20	24	20	18	16																			
10	48	36	29	24	44	34	27	23	30	24	21	26	21	18	22	19	16	14																			

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

	0°	45°	90°
0°	9908	9908	9908
5°	9998	9921	9869
10°	9965	9897	9844
15°	9922	9860	9807
20°	9872	9809	9736
25°	9802	9737	9624
30°	9696	9629	9490
35°	9554	9470	9335
40°	9334	9235	9069
45°	8956	8798	8617
50°	8285	8085	7926
55°	7230	7070	6920
60°	6095	6043	5921
65°	5270	5292	5250
70°	4839	4864	4864
75°	4648	4648	4684
80°	4373	4421	4373
85°	3525	3917	3917



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	101.6	2.0
10°-20°	290.6	5.7
20°-30°	438.3	8.6
30°-40°	522.2	10.3
40°-50°	514.8	10.1
50°-60°	393.5	7.7
60°-70°	243.5	4.8
70°-80°	138.3	2.7
80°-90°	43.0	0.8
90°-100°	146.8	2.9
100°-110°	510.8	10.1
110°-120°	494.8	9.7
120°-130°	388.1	7.6
130°-140°	307.2	6.0
140°-150°	237.1	4.7
150°-160°	169.9	3.3
160°-170°	103.9	2.0
170°-180°	35.2	0.7
0°-30°	830.4	16.3
0°-40°	1352.6	26.6
0°-60°	2260.9	44.5
0°-90°	2685.6	52.9
90°-120°	1152.3	22.7
90°-150°	2084.7	41.0
90°-180°	2394.0	47.1
0°-180°	5079.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1074	1074	1074	1074	1074	
5°	1080	1068	1071	1067	1066	102
15°	1039	1028	1032	1029	1027	293
25°	963	951	956	946	945	443
35°	848	838	841	830	829	529
45°	686	677	674	662	660	526
55°	450	442	440	432	430	403
65°	241	240	242	240	240	245
75°	130	130	130	131	131	138
85°	33	35	37	37	37	39
90°	6	8	8	6	3	5
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	



TEST NUMBER: P845173

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1073.9	1073.9	1073.9	1073.9	1073.9
2.5°	1080.6	1071.2	1073.9	1071.7	1066.6
5°	1079.5	1067.7	1071.2	1067.3	1065.6
7.5°	1071.2	1059.5	1063.0	1059.2	1058.3
10°	1063.7	1052.8	1056.4	1052.7	1050.7
12.5°	1055.6	1044.1	1048.3	1043.8	1042.0
15°	1038.8	1028.0	1032.3	1028.7	1026.7
17.5°	1020.3	1008.7	1013.1	1008.9	1006.5
20°	1005.5	994.7	999.0	992.6	991.6
22.5°	989.2	978.4	982.7	974.1	973.9
25°	962.9	951.2	956.5	946.3	945.4
27.5°	931.7	920.8	925.2	914.8	913.8
30°	910.1	899.3	903.8	892.6	890.8
32.5°	885.8	875.7	879.4	868.2	867.1
35°	848.3	838.3	840.8	829.8	828.8
37.5°	805.5	796.5	797.9	785.6	784.8
40°	775.0	766.2	766.8	753.9	753.0
42.5°	741.9	732.9	732.0	719.2	718.2
45°	686.4	677.4	674.3	662.2	660.4
47.5°	623.1	614.1	608.4	598.5	597.3
50°	577.2	568.2	563.3	554.9	552.2
52.5°	527.6	518.6	514.6	506.9	504.2
55°	449.5	442.3	439.5	431.9	430.2
57.5°	375.4	370.5	369.6	362.4	361.7
60°	330.3	327.5	327.5	320.9	320.9
62.5°	291.8	289.7	291.1	286.8	286.2
65°	241.4	239.6	242.4	240.5	240.5
67.5°	201.7	201.7	203.3	202.5	202.5
70°	179.4	179.4	180.3	180.3	180.3
72.5°	159.5	158.8	161.2	161.1	160.4
75°	130.4	130.4	130.4	131.4	131.4
77.5°	101.6	101.8	102.5	102.3	101.6
80°	82.3	83.2	83.2	82.3	82.3
82.5°	63.1	64.0	64.0	63.8	63.1
85°	33.3	35.0	37.0	37.0	37.0
87.5°	9.5	12.5	14.9	14.9	14.0
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)