

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: P845197

Luminaire Tested: **SQ4P-PR1-100U-075D-B50-1D-UNV**

Issue Date: 8/14/2023



Test Information

Test Method: LM-79-08
Report Number: P845197
REPORT IS A COMBINATION OF REPORTS P700092 AND P700246
Test Lab: INNOVATION CENTER
Issue Date: 8/14/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4P-PR1-100U-075D-B50-1D-UNV
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, 1000 LUMENS PER FOOT UPLIGHT, 750 LUMENS PER FOOT DOWNLIGHT

Light Source: -
Ballast/Driver: -

Summary

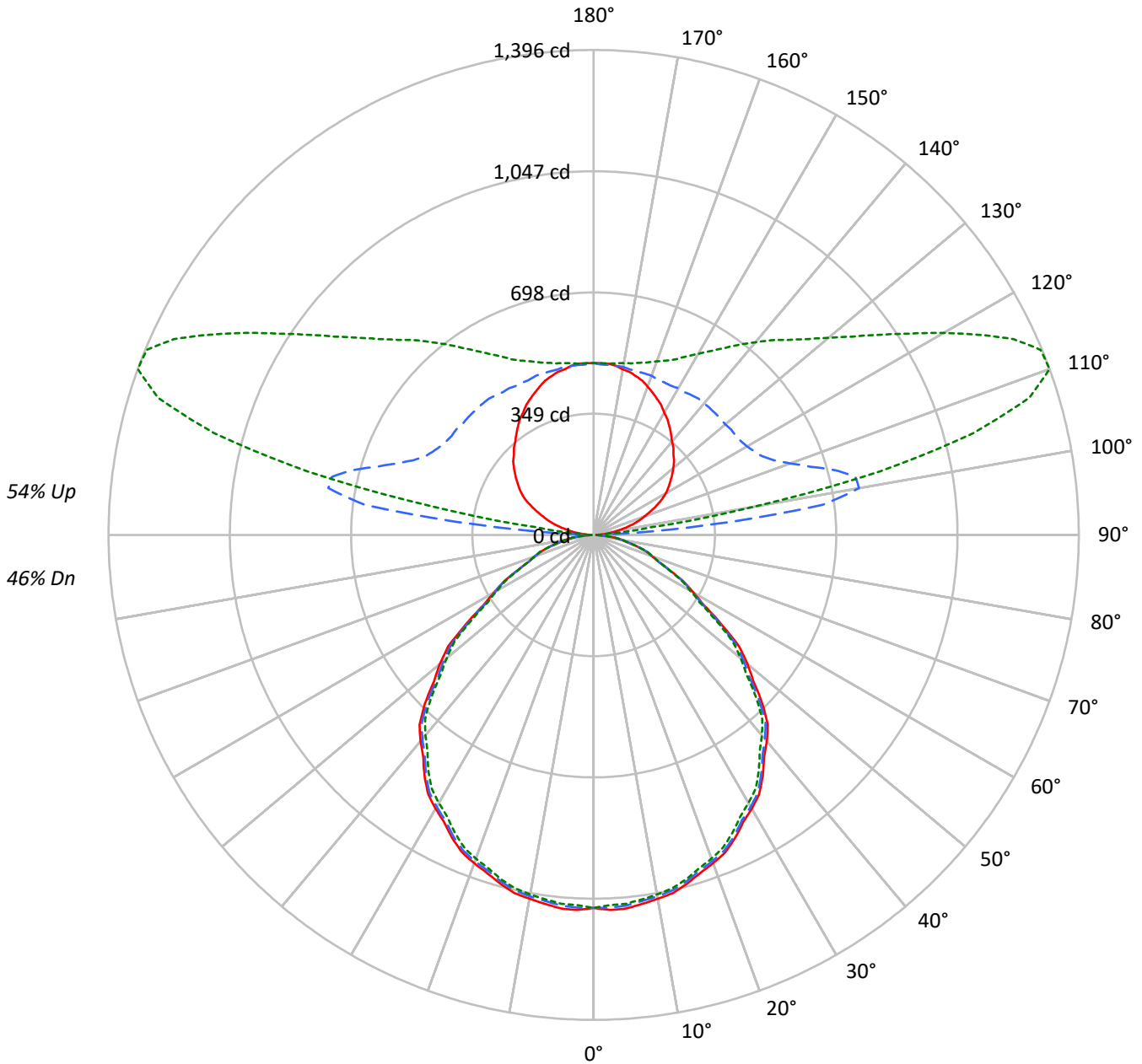
Lumens per Lamp: N/A
Luminaire Lumens: 5897.2 lumens
Efficiency: N/A
Efficacy: 114.3 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 51.6
Input Voltage (V): NR
Input Current (A_{in}): 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	106	106	106	106	97	97	97	97	81	81	81	66	66	66	52	52	52	46																			
1	97	93	89	86	89	85	82	79	71	69	67	58	57	55	46	45	44	39																			
2	89	81	75	70	81	75	70	65	63	59	56	52	49	47	41	39	38	33																			
3	81	72	65	59	74	66	60	55	56	51	47	46	42	40	37	34	32	28																			
4	74	64	56	50	68	59	52	47	49	44	40	41	37	34	33	30	28	24																			
5	68	57	49	43	62	52	45	40	44	39	35	37	33	30	30	27	25	21																			
6	63	51	43	37	57	47	40	35	40	35	30	33	29	26	27	24	22	19																			
7	58	46	38	33	53	43	36	31	36	31	27	30	26	23	25	22	19	17																			
8	54	42	34	29	49	39	32	27	33	28	24	28	24	21	23	20	17	15																			
9	50	38	31	26	46	35	29	24	30	25	21	25	21	19	21	18	16	14																			
10	47	35	28	23	43	32	26	22	28	23	19	24	20	17	19	16	14	12																			

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	1.7
10°-20°	290.6	4.9
20°-30°	438.3	7.4
30°-40°	522.2	8.9
40°-50°	514.8	8.7
50°-60°	393.5	6.7
60°-70°	243.5	4.1
70°-80°	138.3	2.3
80°-90°	43.3	0.7
90°-100°	196.9	3.3
100°-110°	685.2	11.6
110°-120°	663.7	11.3
120°-130°	520.7	8.8
130°-140°	412.1	7.0
140°-150°	318.0	5.4
150°-160°	228.0	3.9
160°-170°	139.4	2.4
170°-180°	47.2	0.8
0°-30°	830.4	14.1
0°-40°	1352.6	22.9
0°-60°	2260.9	38.3
0°-90°	2685.9	45.5
90°-120°	1545.9	26.2
90°-150°	2796.7	47.4
90°-180°	3211.0	54.4
0°-180°	5897.2	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°	7	11	11	7	4	6
95°	33	114	332	85	52	35
105°	114	162	720	1215	1130	120
115°	199	240	535	1130	1333	197
125°	270	332	498	842	1004	241
135°	325	366	495	702	794	252
145°	380	406	491	606	657	238
155°	432	447	484	539	558	199
165°	473	476	487	510	513	133
175°	495	495	491	498	495	47
180°	495	495	495	495	495	



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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°	7.4	11.0	11.0	7.4	3.7
92.5°	18.5	55.4	51.7	22.2	18.5
95°	33.2	114.4	332.4	84.9	51.7
97.5°	51.7	129.3	664.7	302.8	162.5
100°	70.2	136.6	775.4	727.4	469.0
102.5°	92.3	147.7	771.7	1022.9	841.9
105°	114.4	162.5	720.0	1214.9	1130.0



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	177.3	217.8	561.3	1222.2	1392.1
115°	199.4	240.0	535.4	1130.0	1333.0
117.5°	221.5	265.9	520.7	1045.0	1248.1
120°	240.0	288.0	509.6	963.7	1163.2
122.5°	254.8	310.2	502.2	897.3	1078.3
125°	269.5	332.4	498.5	841.9	1004.4
127.5°	284.4	347.1	498.5	801.3	937.9
130°	299.1	354.5	494.8	760.7	882.5
132.5°	313.9	358.2	494.8	731.2	834.5
135°	324.9	365.6	494.8	701.6	793.9
137.5°	339.7	372.9	494.8	675.7	760.7
140°	350.8	384.0	494.8	649.9	723.7
142.5°	365.6	395.1	494.8	624.1	690.5
145°	380.3	406.2	491.1	605.6	657.3
147.5°	395.1	417.3	487.4	587.1	627.8
150°	406.2	428.3	487.4	568.6	601.9
152.5°	421.0	439.5	483.7	550.2	579.8
155°	432.0	446.8	483.7	539.1	557.6
157.5°	443.1	457.9	483.7	528.1	542.8
160°	454.2	465.3	487.4	520.7	531.7
162.5°	465.3	472.7	487.4	513.2	520.7
165°	472.7	476.4	487.4	509.6	513.2
167.5°	480.0	483.7	487.4	505.9	505.9
170°	483.7	487.4	491.1	502.2	502.2
172.5°	491.1	491.1	491.1	498.5	498.5
175°	494.8	494.8	491.1	498.5	494.8
177.5°	494.8	494.8	491.1	498.5	494.8
180°	494.8	494.8	494.8	494.8	494.8



Report Generated By 670246072 / DESKTOP-50001EG





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







107.5°	136.6	181.0	653.6	1299.8	1314.6
110°	155.1	199.4	601.9	1288.8	1395.8



(END OF REPORT)