

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: P845281

Luminaire Tested: **SQ4P-PW1-100U-075D-B50-1D-UNV**

Issue Date: 8/14/2023

Test Information

Test Method: LM-79-08
Report Number: P845281
REPORT IS A COMBINATION OF REPORTS P700096 AND P700246
Test Lab: INNOVATION CENTER
Issue Date: 8/14/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4P-PW1-100U-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

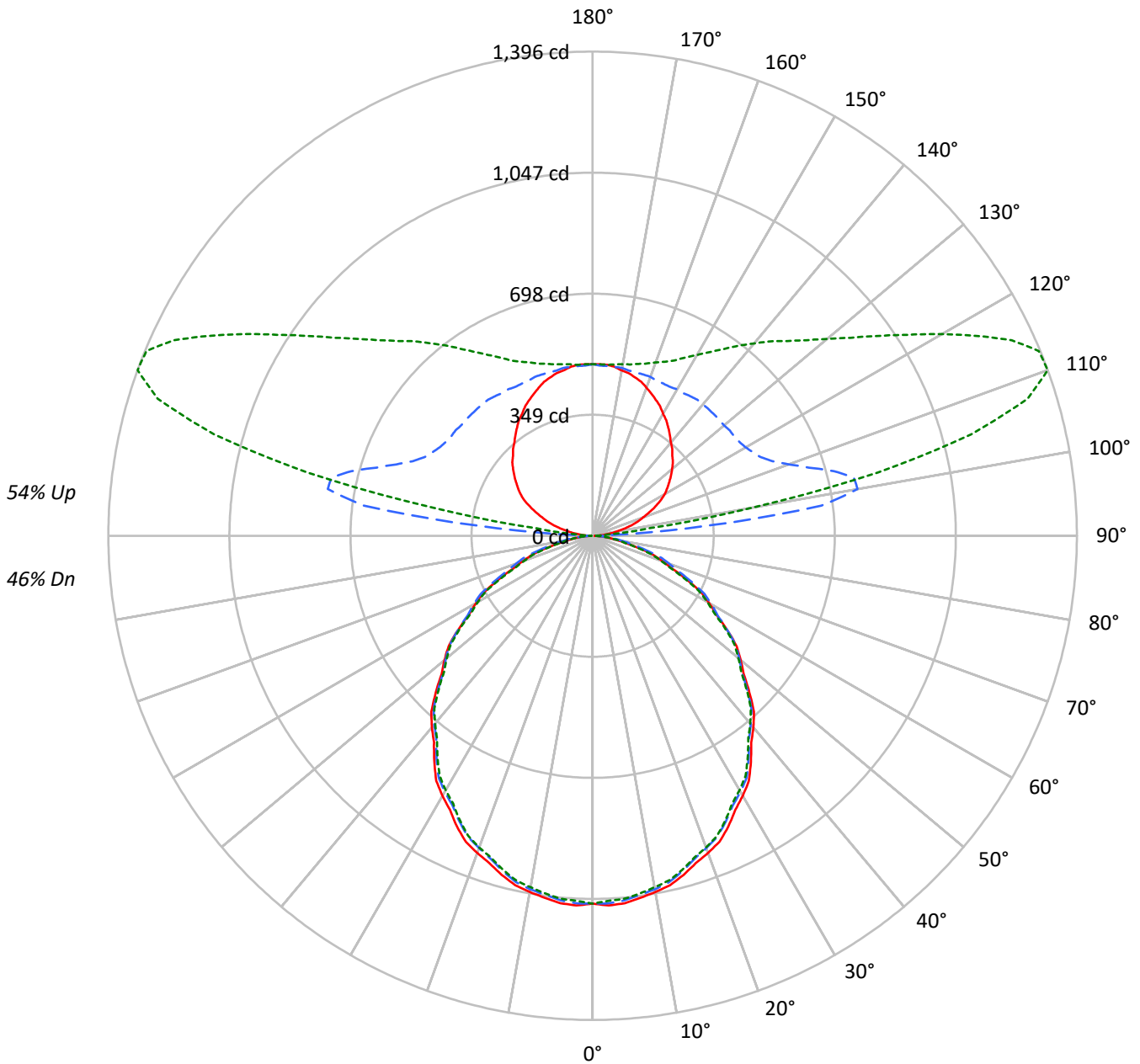
Lumens per Lamp: N/A
Luminaire Lumens: 5911.5 lumens
Efficiency: N/A
Efficacy: 114.6 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.19 / 1.31
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

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	85	89	85	82	79	71	69	67	58	57	55	46	45	44	39																			
2	88	81	75	70	81	75	69	65	62	59	55	51	48	46	41	39	37	33																			
3	81	71	64	58	74	66	59	54	55	50	47	45	42	39	36	34	32	28																			
4	74	63	55	49	67	58	51	46	49	44	40	40	37	33	32	30	27	24																			
5	68	56	48	42	62	52	45	39	44	38	34	36	32	29	29	26	24	21																			
6	62	50	42	37	57	47	39	34	39	34	30	33	29	25	26	23	21	18																			
7	58	45	38	32	53	42	35	30	36	30	26	30	26	22	24	21	19	16																			
8	53	41	34	28	49	38	31	27	33	27	23	27	23	20	22	19	17	14																			
9	50	38	30	25	46	35	28	24	30	25	21	25	21	18	20	17	15	13																			
10	46	34	27	23	43	32	26	21	27	22	19	23	19	16	19	16	14	12																			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9786	9786	9786
5°	9850	9773	9730
10°	9771	9694	9640
15°	9669	9561	9525
20°	9553	9405	9388
25°	9420	9249	9219
30°	9221	9081	9021
35°	8959	8831	8778
40°	8680	8544	8510
45°	8341	8232	8194
50°	7996	7930	7874
55°	7621	7621	7502
60°	7160	7296	7038
65°	6549	6875	6388
70°	5770	6328	5624
75°	4934	5664	4795
80°	3825	4771	3879
85°	2467	3673	3260



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	99.9	1.7
10°-20°	282.0	4.8
20°-30°	418.3	7.1
30°-40°	489.5	8.3
40°-50°	487.3	8.2
50°-60°	420.8	7.1
60°-70°	302.9	5.1
70°-80°	158.8	2.7
80°-90°	40.6	0.7
90°-100°	196.9	3.3
100°-110°	685.2	11.6
110°-120°	663.7	11.2
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°	800.3	13.5
0°-40°	1289.7	21.8
0°-60°	2197.9	37.2
0°-90°	2700.2	45.7
90°-120°	1545.9	26.2
90°-150°	2796.7	47.3
90°-180°	3211.0	54.3
0°-180°	5911.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1061	1061	1061	1061	1061	
5°	1064	1052	1055	1052	1051	101
15°	1012	999	1001	999	997	285
25°	925	910	908	903	906	425
35°	795	784	784	777	779	497
45°	639	634	631	629	628	493
55°	474	473	474	467	466	423
65°	300	309	315	303	293	297
75°	138	151	159	148	134	148
85°	23	31	35	33	31	31
90°	7	11	11	7	4	5
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°	1060.7	1060.7	1060.7	1060.7	1060.7
2.5°	1066.8	1058.0	1060.7	1058.5	1053.3
5°	1063.6	1051.7	1055.2	1052.4	1050.6
7.5°	1052.8	1041.9	1044.3	1041.4	1040.3
10°	1043.0	1032.1	1034.7	1030.9	1029.0
12.5°	1031.9	1020.1	1022.8	1018.9	1017.9
15°	1012.3	999.3	1001.0	999.1	997.2
17.5°	989.3	976.5	976.7	973.7	973.3
20°	973.0	959.3	957.9	954.2	956.2
22.5°	955.1	940.6	939.3	934.1	936.7
25°	925.3	909.8	908.5	902.9	905.6
27.5°	890.9	875.7	875.7	867.8	870.6
30°	865.5	850.8	852.4	843.1	846.8
32.5°	838.5	825.4	826.2	817.0	820.6
35°	795.4	784.5	784.1	776.7	779.4
37.5°	751.2	741.6	740.0	735.8	736.4
40°	720.7	712.4	709.4	706.6	706.6
42.5°	688.4	681.0	677.9	675.8	675.2
45°	639.3	633.8	630.9	629.0	628.0
47.5°	590.6	585.6	583.0	581.8	580.8
50°	557.1	553.4	552.5	549.5	548.6
52.5°	523.4	521.2	520.2	516.7	515.7
55°	473.8	473.1	473.8	467.3	466.4
57.5°	422.2	423.7	426.8	417.9	415.7
60°	388.0	391.5	395.4	385.1	381.4
62.5°	352.6	358.6	364.0	352.1	346.8
65°	300.0	309.1	314.9	302.6	292.6
67.5°	249.2	260.5	267.4	254.2	242.8
70°	213.9	226.9	234.6	221.2	208.5
72.5°	183.4	197.6	203.9	191.3	178.5
75°	138.4	151.1	158.9	148.2	134.5
77.5°	98.2	110.2	116.6	107.5	96.1
80°	72.0	84.7	89.8	82.0	73.0
82.5°	51.0	61.7	65.1	60.5	54.2
85°	23.3	30.7	34.7	32.7	30.8
87.5°	6.0	11.1	14.2	14.2	14.9
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)