

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: P845244

Luminaire Tested: **SQ4P-PW1-050U-075D-B40-1D-UNV**

Issue Date: 8/14/2023



**Test Information**

Test Method: LM-79-08  
Report Number: P845244  
REPORT IS A COMBINATION OF REPORTS P700208 AND P700244  
Test Lab: INNOVATION CENTER  
Issue Date: 8/14/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: SQ4P-PW1-050U-075D-B40-1D-UNV  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, 500 LUMENS PER FOOT UPLIGHT, 750 LUMENS PER FOOT DOWNLIGHT  
  
Light Source: -  
Ballast/Driver: -

**Summary**

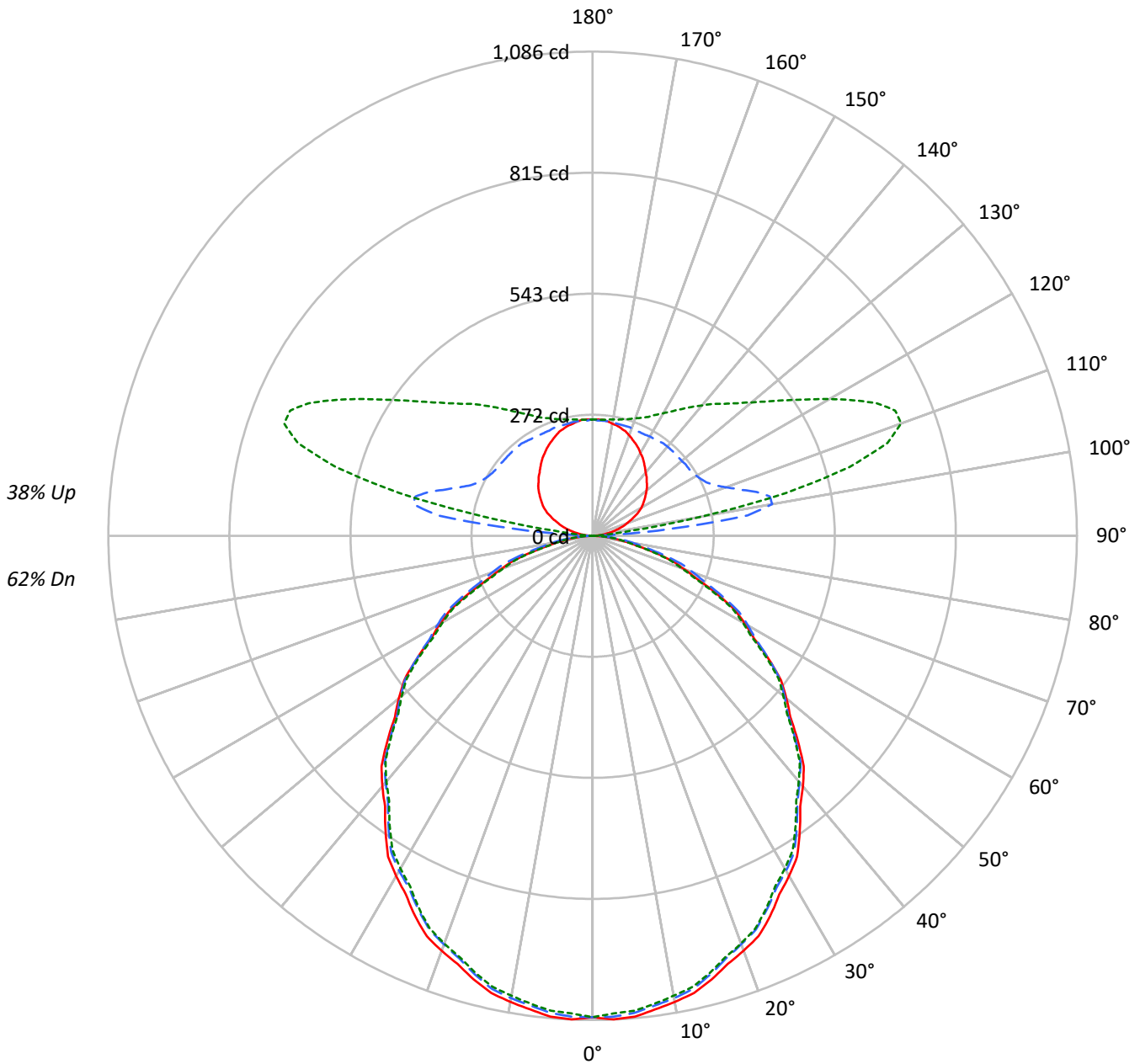
Lumens per Lamp: N/A  
Luminaire Lumens: 4441.5 lumens  
Efficiency: N/A  
Efficacy: 115.1 lumens/watt  
Spacing Criteria (0/90/45): 1.22 / 1.19 / 1.31  
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')  
CIE Type: Semi-Direct

Input Watts (W): 38.6  
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	110	110	110	110	103	103	103	103	90	90	90	78	78	78	67	67	67	62																			
1	101	96	92	89	94	90	87	84	79	77	74	69	67	65	59	58	57	52																			
2	92	84	78	73	86	79	74	69	69	65	62	61	57	55	52	50	48	44																			
3	84	74	67	61	78	70	63	58	61	56	52	54	50	46	47	44	41	37																			
4	77	66	58	51	71	62	55	49	55	49	44	48	43	40	42	38	35	32																			
5	70	59	50	44	66	55	48	42	49	43	38	43	38	35	38	34	31	28																			
6	65	53	44	38	61	50	42	37	44	38	34	39	34	30	34	30	27	25																			
7	60	48	39	34	56	45	38	32	40	34	30	35	31	27	31	27	24	22																			
8	56	43	35	30	52	41	34	29	37	31	26	32	28	24	29	25	22	19																			
9	52	40	32	27	49	38	31	26	34	28	24	30	25	22	26	23	20	18																			
10	49	36	29	24	46	35	28	23	31	25	21	28	23	20	25	21	18	16																			

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

	0°	45°	90°
0°	9962	9962	9962
5°	10026	9948	9904
10°	9947	9867	9814
15°	9842	9732	9696
20°	9724	9574	9556
25°	9588	9414	9384
30°	9386	9244	9183
35°	9120	8989	8936
40°	8835	8696	8662
45°	8490	8379	8340
50°	8140	8071	8015
55°	7758	7758	7636
60°	7287	7427	7163
65°	6667	6999	6501
70°	5873	6442	5724
75°	5023	5764	4880
80°	3895	4856	3948
85°	2509	3737	3313



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	101.7	2.3
10°-20°	287.1	6.5
20°-30°	425.8	9.6
30°-40°	498.3	11.2
40°-50°	496.0	11.2
50°-60°	428.3	9.6
60°-70°	308.3	6.9
70°-80°	161.7	3.6
80°-90°	40.7	0.9
90°-100°	103.8	2.3
100°-110°	361.4	8.1
110°-120°	350.0	7.9
120°-130°	274.6	6.2
130°-140°	217.3	4.9
140°-150°	167.7	3.8
150°-160°	120.2	2.7
160°-170°	73.5	1.7
170°-180°	24.9	0.6
0°-30°	814.6	18.3
0°-40°	1312.8	29.6
0°-60°	2237.2	50.4
0°-90°	2747.9	61.9
90°-120°	815.2	18.4
90°-150°	1474.9	33.2
90°-180°	1694.0	38.1
0°-180°	4441.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1080	1080	1080	1080	1080	
5°	1083	1070	1074	1071	1069	103
15°	1030	1017	1019	1017	1015	290
25°	942	926	925	919	922	433
35°	810	798	798	791	793	506
45°	651	645	642	640	639	502
55°	482	482	482	476	475	430
65°	305	315	321	308	298	303
75°	141	154	162	151	137	151
85°	24	31	35	33	31	31
90°	4	6	6	4	2	3
95°	18	60	175	45	27	19
105°	60	86	380	641	596	63
115°	105	127	282	596	703	104
125°	142	175	263	444	530	127
135°	171	193	261	370	419	133
145°	201	214	259	319	347	125
155°	228	236	255	284	294	105
165°	249	251	257	269	271	70
175°	261	261	259	263	261	25
180°	261	261	261	261	261	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1079.7	1079.7	1079.7	1079.7	1079.7
2.5°	1085.9	1076.9	1079.7	1077.4	1072.2
5°	1082.6	1070.5	1074.1	1071.2	1069.4
7.5°	1071.7	1060.5	1063.0	1060.1	1058.9
10°	1061.7	1050.6	1053.2	1049.4	1047.5
12.5°	1050.4	1038.4	1041.1	1037.1	1036.1
15°	1030.4	1017.2	1018.9	1016.9	1015.1
17.5°	1007.1	994.0	994.2	991.2	990.7
20°	990.4	976.4	975.1	971.3	973.3
22.5°	972.2	957.4	956.1	950.8	953.5
25°	941.8	926.0	924.8	919.1	921.8
27.5°	906.8	891.3	891.3	883.3	886.2
30°	881.0	866.1	867.7	858.2	862.0
32.5°	853.6	840.2	841.0	831.6	835.3
35°	809.7	798.5	798.1	790.6	793.4
37.5°	764.7	754.9	753.3	749.0	749.6
40°	733.6	725.1	722.0	719.2	719.2
42.5°	700.7	693.2	690.1	687.9	687.3
45°	650.7	645.1	642.2	640.3	639.2
47.5°	601.2	596.1	593.5	592.2	591.2
50°	567.1	563.3	562.3	559.3	558.4
52.5°	532.8	530.6	529.5	525.9	524.9
55°	482.3	481.5	482.3	475.7	474.7
57.5°	429.8	431.3	434.4	425.4	423.1
60°	394.9	398.5	402.5	392.0	388.2
62.5°	358.9	365.0	370.5	358.4	353.0
65°	305.4	314.7	320.6	308.0	297.8
67.5°	253.7	265.1	272.2	258.7	247.1
70°	217.7	230.9	238.8	225.1	212.2
72.5°	186.6	201.2	207.6	194.7	181.7
75°	140.9	153.8	161.7	150.9	136.9
77.5°	99.9	112.2	118.7	109.4	97.8
80°	73.3	86.2	91.4	83.4	74.3
82.5°	51.9	62.8	66.3	61.5	55.1
85°	23.7	31.2	35.3	33.3	31.3
87.5°	6.1	11.3	14.4	14.4	15.2
90°	3.9	5.8	5.8	3.9	1.9
92.5°	9.7	29.2	27.2	11.7	9.7
95°	17.5	60.4	175.3	44.8	27.2
97.5°	27.2	68.1	350.5	159.7	85.7
100°	37.0	72.1	408.9	383.7	247.3
102.5°	48.6	77.9	407.0	539.4	444.0
105°	60.4	85.7	379.8	640.6	595.9



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	93.5	114.9	296.0	644.6	734.2
115°	105.1	126.6	282.4	595.9	703.0
117.5°	116.9	140.2	274.5	551.1	658.2
120°	126.6	151.9	268.7	508.3	613.4
122.5°	134.4	163.6	264.8	473.2	568.6
125°	142.2	175.3	262.9	444.0	529.7
127.5°	149.9	183.1	262.9	422.6	494.6
130°	157.8	186.9	261.0	401.2	465.4
132.5°	165.5	188.9	261.0	385.6	440.1
135°	171.3	192.7	261.0	370.0	418.7
137.5°	179.2	196.7	261.0	356.3	401.2
140°	185.0	202.5	261.0	342.8	381.7
142.5°	192.7	208.3	261.0	329.1	364.2
145°	200.6	214.3	259.0	319.4	346.6
147.5°	208.3	220.1	257.1	309.6	331.0
150°	214.3	225.9	257.1	299.9	317.5
152.5°	222.0	231.7	255.2	290.1	305.7
155°	227.8	235.7	255.2	284.3	294.0
157.5°	233.6	241.5	255.2	278.5	286.3
160°	239.6	245.4	257.1	274.5	280.4
162.5°	245.4	249.2	257.1	270.7	274.5
165°	249.2	251.2	257.1	268.7	270.7
167.5°	253.1	255.2	257.1	266.8	266.8
170°	255.2	257.1	259.0	264.8	264.8
172.5°	259.0	259.0	259.0	262.9	262.9
175°	261.0	261.0	259.0	262.9	261.0
177.5°	261.0	261.0	259.0	262.9	261.0
180°	261.0	261.0	261.0	261.0	261.0



Report Generated By 670246072 / DESKTOP-50001EG







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







107.5°	72.1	95.5	344.7	685.5	693.3
110°	81.8	105.1	317.5	679.6	736.1



(END OF REPORT)