

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: P845241

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

Issue Date: 8/14/2023



**Test Information**

Test Method: LM-79-08  
Report Number: P845241  
REPORT IS A COMBINATION OF REPORTS P700207 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-050D-B40-1D-UNV  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, 500 LUMENS PER FOOT UPLIGHT, 500 LUMENS PER FOOT DOWNLIGHT  
  
Light Source: -  
Ballast/Driver: -

**Summary**

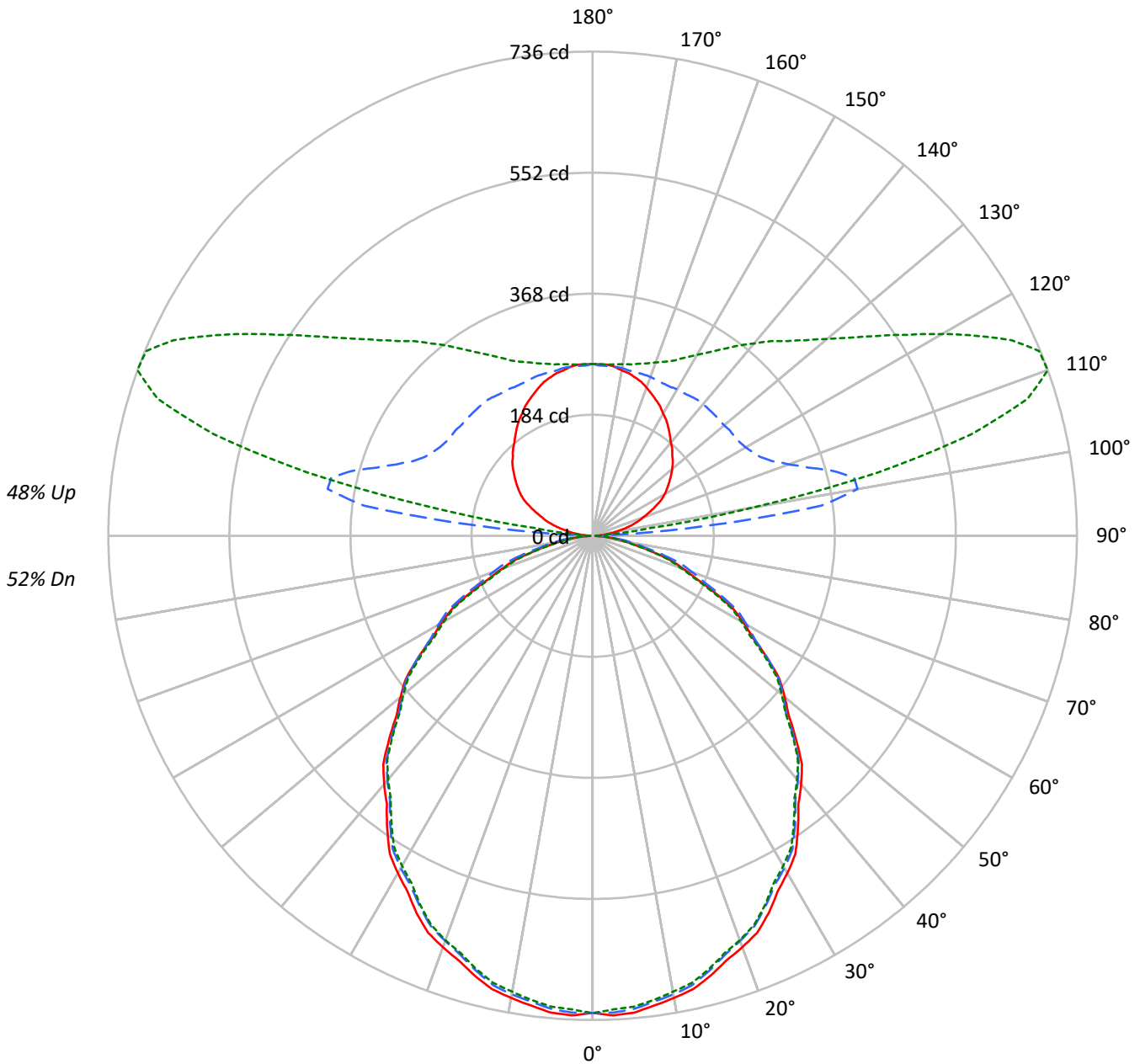
Lumens per Lamp: N/A  
Luminaire Lumens: 3540.2 lumens  
Efficiency: N/A  
Efficacy: 118.8 lumens/watt  
Spacing Criteria (0/90/45): 1.22 / 1.19 / 1.31  
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')  
CIE Type: General Diffuse

Input Watts (W): 29.8  
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

TEST NUMBER: P845241

CATALOG NUMBER: SQ4P-PW1-050U-050D-B40-1D-UNV

### Luminous Intensity Polar Plot





TEST NUMBER: P845241

CATALOG NUMBER: SQ4P-PW1-050U-050D-B40-1D-UNV

**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	58	58	58	52																			
1	98	94	90	87	91	87	84	81	74	72	70	62	61	59	52	50	49	44																			
2	90	82	76	71	83	76	71	67	65	61	58	55	52	50	45	43	42	37																			
3	82	72	65	59	75	67	61	56	58	53	49	49	45	42	40	38	36	32																			
4	75	64	56	50	69	60	53	47	51	46	42	43	39	36	36	33	31	27																			
5	69	57	49	43	63	53	46	41	46	40	36	39	35	31	33	29	27	24																			
6	63	51	43	37	58	48	41	35	41	36	31	35	31	27	30	26	24	21																			
7	59	46	38	33	54	43	36	31	37	32	28	32	28	24	27	24	21	18																			
8	54	42	34	29	50	39	32	27	34	29	25	29	25	22	25	21	19	16																			
9	51	38	31	26	47	36	29	25	31	26	22	27	23	19	23	19	17	15																			
10	47	35	28	23	44	33	26	22	29	24	20	25	21	18	21	18	15	13																			

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

	0°	45°	90°
0°	6694	6694	6694
5°	6738	6685	6655
10°	6684	6630	6594
15°	6614	6539	6515
20°	6534	6433	6421
25°	6443	6326	6305
30°	6307	6212	6171
35°	6127	6040	6004
40°	5936	5844	5821
45°	5705	5630	5605
50°	5469	5423	5385
55°	5213	5213	5131
60°	4895	4991	4814
65°	4480	4702	4368
70°	3947	4330	3844
75°	3376	3871	3283
80°	2614	3257	2651
85°	1694	2498	2223



TEST NUMBER: P845241

CATALOG NUMBER: SQ4P-PW1-050U-050D-B40-1D-UNV

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	68.3	1.9
10°-20°	192.9	5.4
20°-30°	286.1	8.1
30°-40°	334.8	9.5
40°-50°	333.3	9.4
50°-60°	287.8	8.1
60°-70°	207.2	5.9
70°-80°	108.6	3.1
80°-90°	27.6	0.8
90°-100°	103.8	2.9
100°-110°	361.4	10.2
110°-120°	350.0	9.9
120°-130°	274.6	7.8
130°-140°	217.3	6.1
140°-150°	167.7	4.7
150°-160°	120.2	3.4
160°-170°	73.5	2.1
170°-180°	24.9	0.7
0°-30°	547.4	15.5
0°-40°	882.2	24.9
0°-60°	1503.3	42.5
0°-90°	1846.7	52.2
90°-120°	815.2	23.0
90°-150°	1474.9	41.7
90°-180°	1694.0	47.8
0°-180°	3540.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	726	726	726	726	726	
5°	728	719	722	720	719	69
15°	692	684	685	683	682	195
25°	633	622	621	618	619	291
35°	544	537	536	531	533	340
45°	437	434	432	430	430	337
55°	324	324	324	320	319	289
65°	205	211	215	207	200	203
75°	95	103	109	101	92	101
85°	16	21	24	22	21	21
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	



TEST NUMBER: P845241

CATALOG NUMBER: SQ4P-PW1-050U-050D-B40-1D-UNV

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	725.5	725.5	725.5	725.5	725.5
2.5°	729.7	723.7	725.5	724.0	720.5
5°	727.5	719.3	721.8	719.8	718.6
7.5°	720.1	712.6	714.3	712.3	711.6
10°	713.4	706.0	707.7	705.2	703.8
12.5°	705.8	697.7	699.6	696.9	696.2
15°	692.4	683.6	684.6	683.3	682.1
17.5°	676.7	667.9	668.0	666.0	665.6
20°	665.5	656.2	655.2	652.7	654.0
22.5°	653.2	643.4	642.5	638.9	640.6
25°	632.9	622.2	621.4	617.6	619.4
27.5°	609.3	598.9	598.9	593.6	595.5
30°	592.0	581.9	583.1	576.7	579.2
32.5°	573.6	564.6	565.1	558.8	561.4
35°	544.0	536.6	536.3	531.2	533.1
37.5°	513.8	507.2	506.1	503.2	503.7
40°	492.9	487.2	485.2	483.3	483.3
42.5°	470.9	465.8	463.7	462.2	461.9
45°	437.2	433.6	431.5	430.2	429.6
47.5°	404.0	400.5	398.8	397.9	397.2
50°	381.0	378.5	377.8	375.9	375.2
52.5°	358.1	356.5	355.8	353.4	352.7
55°	324.1	323.6	324.1	319.7	319.0
57.5°	288.8	289.8	291.9	285.9	284.3
60°	265.3	267.8	270.5	263.4	260.9
62.5°	241.2	245.3	249.0	240.8	237.2
65°	205.2	211.4	215.4	207.0	200.1
67.5°	170.5	178.2	183.0	173.8	166.1
70°	146.3	155.1	160.5	151.3	142.5
72.5°	125.4	135.2	139.5	130.8	122.1
75°	94.7	103.4	108.6	101.4	92.1
77.5°	67.2	75.4	79.8	73.5	65.7
80°	49.2	57.9	61.3	56.1	49.9
82.5°	34.9	42.3	44.5	41.3	37.0
85°	16.0	20.9	23.6	22.4	21.0
87.5°	4.1	7.6	9.7	9.7	10.3
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



TEST NUMBER: P845241

CATALOG NUMBER: SQ4P-PW1-050U-050D-B40-1D-UNV

**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)