

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: P845242

Luminaire Tested: **SQ4P-PW1-050U-050D-B50-1D-UNV**

Issue Date: 8/14/2023



**Test Information**

Test Method: LM-79-08  
Report Number: P845242  
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-B50-1D-UNV  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, 500 LUMENS PER FOOT  
UPLIGHT, 500 LUMENS PER FOOT DOWNLIGHT  
  
Light Source: -  
Ballast/Driver: -

**Summary**

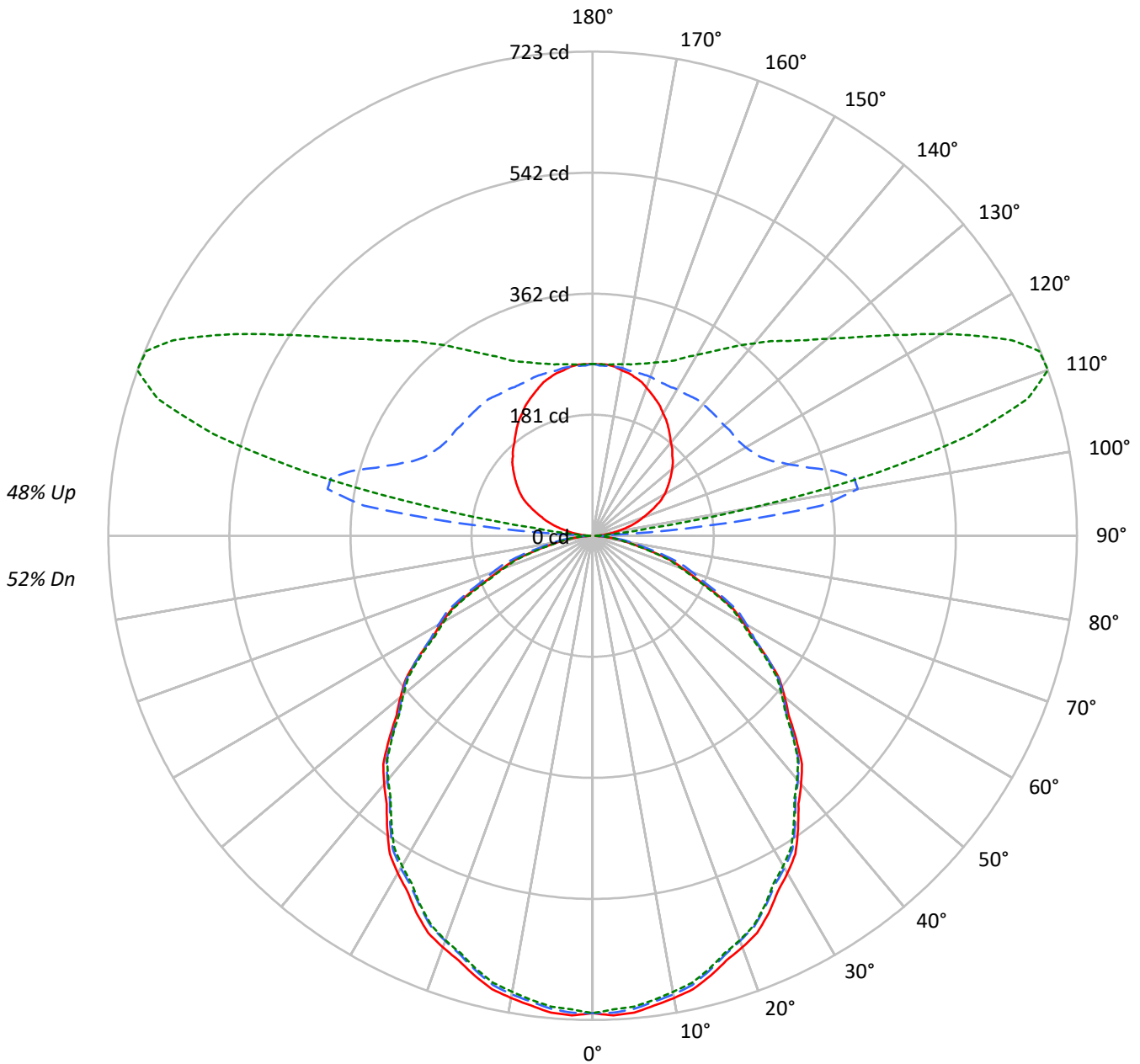
Lumens per Lamp: N/A  
Luminaire Lumens: 3478.0 lumens  
Efficiency: N/A  
Efficacy: 116.7 lumens/watt  
Spacing Criteria (0/90/45): 1.22 / 1.19 / 1.31  
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')  
CIE Type: General Diffuse

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

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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	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°	6576	6576	6576
5°	6619	6567	6538
10°	6566	6514	6478
15°	6497	6424	6401
20°	6419	6320	6308
25°	6330	6214	6195
30°	6196	6102	6062
35°	6020	5935	5898
40°	5832	5741	5718
45°	5605	5531	5506
50°	5372	5328	5291
55°	5122	5122	5041
60°	4811	4903	4729
65°	4399	4619	4292
70°	3879	4254	3777
75°	3315	3804	3223
80°	2572	3204	2603
85°	1662	2456	2191



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	67.1	1.9
10°-20°	189.5	5.4
20°-30°	281.1	8.1
30°-40°	328.9	9.5
40°-50°	327.4	9.4
50°-60°	282.8	8.1
60°-70°	203.6	5.9
70°-80°	106.7	3.1
80°-90°	27.1	0.8
90°-100°	102.0	2.9
100°-110°	355.0	10.2
110°-120°	343.9	9.9
120°-130°	269.8	7.8
130°-140°	213.5	6.1
140°-150°	164.8	4.7
150°-160°	118.1	3.4
160°-170°	72.3	2.1
170°-180°	24.4	0.7
0°-30°	537.7	15.5
0°-40°	866.6	24.9
0°-60°	1476.9	42.5
0°-90°	1814.2	52.2
90°-120°	800.9	23.0
90°-150°	1449.0	41.7
90°-180°	1664.0	47.8
0°-180°	3478.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	713	713	713	713	713	
5°	715	707	709	707	706	68
15°	680	672	673	671	670	192
25°	622	611	610	607	608	286
35°	534	527	527	522	524	334
45°	430	426	424	423	422	331
55°	318	318	318	314	313	284
65°	202	208	212	203	197	200
75°	93	102	107	100	90	100
85°	16	21	23	22	21	21
90°	4	6	6	4	2	3
95°	17	59	172	44	27	18
105°	59	84	373	629	585	62
115°	103	124	277	585	691	102
125°	140	172	258	436	520	125
135°	168	189	256	364	411	130
145°	197	210	254	314	340	123
155°	224	232	251	279	289	103
165°	245	247	253	264	266	69
175°	256	256	254	258	256	24
180°	256	256	256	256	256	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	712.8	712.8	712.8	712.8	712.8
2.5°	716.9	711.0	712.8	711.3	707.8
5°	714.7	706.7	709.1	707.2	705.9
7.5°	707.4	700.1	701.7	699.7	699.1
10°	700.9	693.6	695.3	692.8	691.5
12.5°	693.4	685.5	687.3	684.6	683.9
15°	680.2	671.6	672.6	671.3	670.1
17.5°	664.8	656.1	656.2	654.3	653.9
20°	653.8	644.6	643.7	641.2	642.5
22.5°	641.8	632.0	631.2	627.7	629.4
25°	621.8	611.3	610.4	606.7	608.5
27.5°	598.6	588.4	588.4	583.1	585.0
30°	581.6	571.7	572.8	566.6	569.0
32.5°	563.5	554.6	555.1	548.9	551.5
35°	534.5	527.1	526.9	521.9	523.7
37.5°	504.8	498.3	497.2	494.4	494.9
40°	484.2	478.7	476.7	474.8	474.8
42.5°	462.6	457.6	455.5	454.1	453.7
45°	429.6	425.9	423.9	422.6	422.0
47.5°	396.9	393.5	391.8	390.9	390.2
50°	374.3	371.9	371.2	369.3	368.6
52.5°	351.8	350.2	349.6	347.2	346.5
55°	318.4	317.9	318.4	314.1	313.4
57.5°	283.7	284.8	286.7	280.8	279.3
60°	260.7	263.0	265.7	258.8	256.3
62.5°	237.0	241.0	244.6	236.6	233.1
65°	201.5	207.7	211.6	203.4	196.6
67.5°	167.5	175.1	179.7	170.8	163.2
70°	143.8	152.4	157.7	148.6	140.0
72.5°	123.2	132.8	137.1	128.5	120.0
75°	93.0	101.6	106.7	99.6	90.4
77.5°	66.0	74.1	78.4	72.2	64.5
80°	48.4	56.9	60.3	55.1	49.0
82.5°	34.3	41.5	43.7	40.6	36.4
85°	15.7	20.6	23.2	22.0	20.7
87.5°	4.0	7.4	9.5	9.5	10.1
90°	3.8	5.7	5.7	3.8	1.9
92.5°	9.5	28.7	26.8	11.5	9.5
95°	17.2	59.3	172.2	44.0	26.8
97.5°	26.8	66.9	344.3	156.9	84.2
100°	36.4	70.8	401.8	376.9	243.0
102.5°	47.8	76.5	399.9	529.9	436.2
105°	59.3	84.2	373.1	629.4	585.4



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	91.9	112.9	290.8	633.3	721.3
115°	103.3	124.3	277.4	585.4	690.6
117.5°	114.8	137.8	269.7	541.4	646.6
120°	124.3	149.2	264.0	499.3	602.6
122.5°	132.0	160.7	260.2	464.9	558.6
125°	139.7	172.2	258.3	436.2	520.4
127.5°	147.3	179.8	258.3	415.2	485.9
130°	155.0	183.6	256.4	394.1	457.3
132.5°	162.6	185.5	256.4	378.8	432.4
135°	168.3	189.4	256.4	363.5	411.4
137.5°	176.0	193.3	256.4	350.1	394.1
140°	181.7	199.0	256.4	336.7	375.0
142.5°	189.4	204.7	256.4	323.3	357.8
145°	197.1	210.5	254.5	313.8	340.5
147.5°	204.7	216.2	252.6	304.2	325.2
150°	210.5	221.9	252.6	294.7	311.9
152.5°	218.1	227.6	250.7	285.0	300.4
155°	223.8	231.5	250.7	279.3	288.8
157.5°	229.5	237.2	250.7	273.6	281.2
160°	235.3	241.1	252.6	269.7	275.5
162.5°	241.1	244.9	252.6	265.9	269.7
165°	244.9	246.8	252.6	264.0	265.9
167.5°	248.7	250.7	252.6	262.1	262.1
170°	250.7	252.6	254.5	260.2	260.2
172.5°	254.5	254.5	254.5	258.3	258.3
175°	256.4	256.4	254.5	258.3	256.4
177.5°	256.4	256.4	254.5	258.3	256.4
180°	256.4	256.4	256.4	256.4	256.4



Report Generated By 670246072 / DESKTOP-50001EG







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







107.5°	70.8	93.8	338.6	673.5	681.1
110°	80.4	103.3	311.9	667.7	723.2



(END OF REPORT)