

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: P845251

Luminaire Tested: **SQ4P-PW1-050U-125D-B50-1D-UNV**

Issue Date: 8/14/2023

**Test Information**

Test Method: LM-79-08  
Report Number: P845251  
REPORT IS A COMBINATION OF REPORTS P700210 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-125D-B50-1D-UNV  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, 500 LUMENS PER FOOT  
UPLIGHT, 1250 LUMENS PER FOOT DOWNLIGHT  
  
Light Source: -  
Ballast/Driver: -

**Summary**

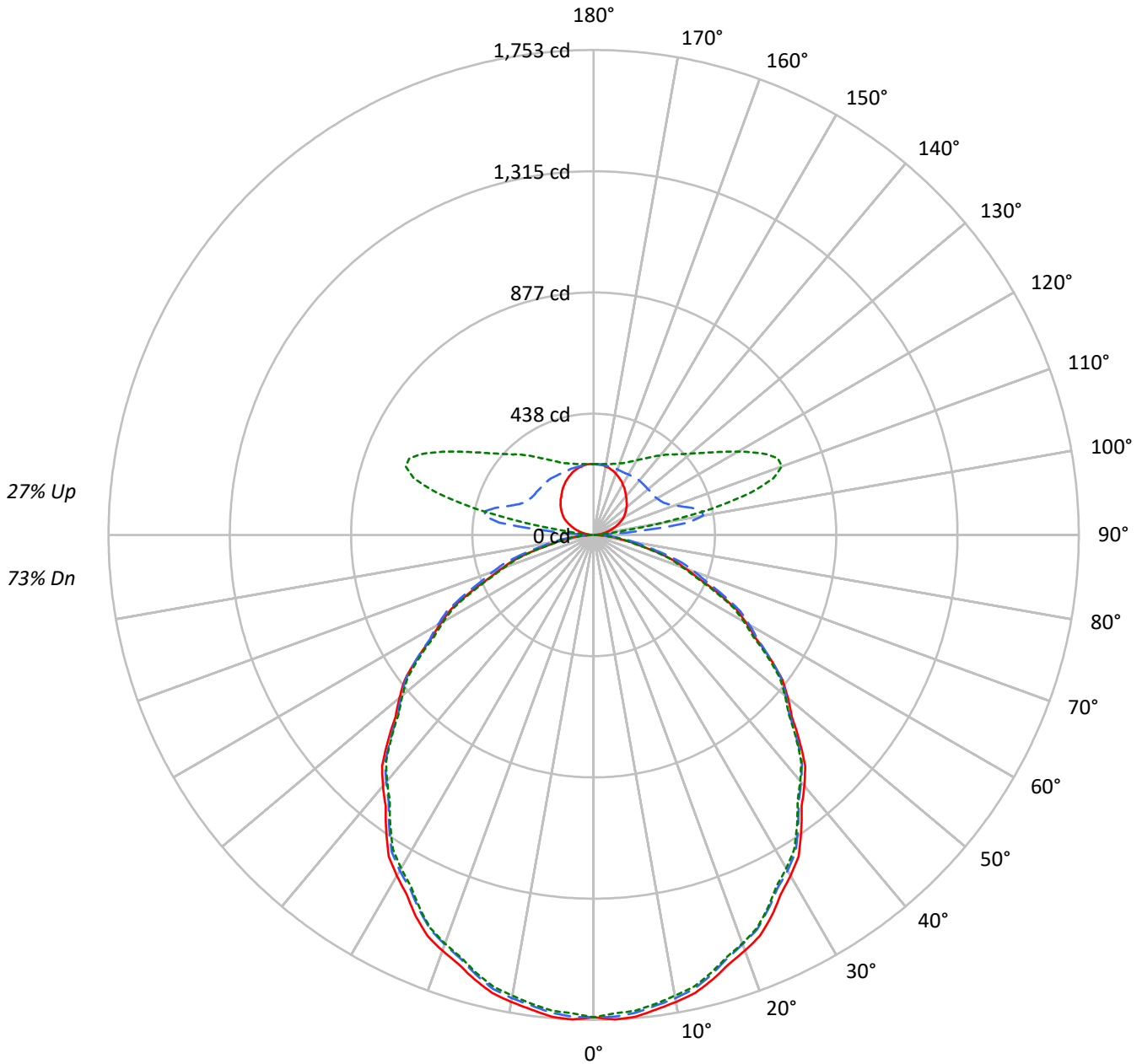
Lumens per Lamp: N/A  
Luminaire Lumens: 6099.9 lumens  
Efficiency: N/A  
Efficacy: 103.7 lumens/watt  
Spacing Criteria (0/90/45): 1.22 / 1.19 / 1.31  
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')  
CIE Type: Semi-Direct

Input Watts (W): 58.8  
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: P845251

CATALOG NUMBER: SQ4P-PW1-050U-125D-B50-1D-UNV

### Luminous Intensity Polar Plot





TEST NUMBER: P845251

CATALOG NUMBER: SQ4P-PW1-050U-125D-B50-1D-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	113	113	113	113	107	107	107	107	96	96	96	86	86	86	77	77	77	73																											
1	103	99	95	91	98	94	90	87	85	82	79	76	74	72	68	67	65	62																											
2	94	86	80	75	89	82	76	72	74	70	66	67	64	60	60	58	55	52																											
3	86	76	68	62	81	72	66	60	66	60	56	59	55	51	54	50	47	44																											
4	79	67	59	53	74	64	57	51	58	52	48	53	48	44	48	44	41	38																											
5	72	60	52	46	68	58	50	44	52	46	41	48	42	38	43	39	36	33																											
6	67	54	46	40	63	52	44	39	47	41	36	43	38	34	39	35	31	29																											
7	62	49	41	35	58	47	39	34	43	37	32	39	34	30	36	31	28	26																											
8	57	45	37	31	54	43	35	30	39	33	28	36	31	27	33	28	25	23																											
9	54	41	33	28	51	39	32	27	36	30	26	33	28	24	30	26	23	21																											
10	50	38	30	25	48	36	29	25	33	27	23	31	26	22	28	24	21	19																											

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

	0°	45°	90°
0°	16084	16084	16084
5°	16189	16061	15990
10°	16059	15929	15843
15°	15889	15712	15654
20°	15699	15457	15429
25°	15480	15199	15150
30°	15152	14924	14825
35°	14722	14514	14427
40°	14264	14041	13987
45°	13708	13529	13467
50°	13142	13031	12941
55°	12526	12526	12329
60°	11765	11990	11564
65°	10763	11300	10496
70°	9485	10399	9242
75°	8106	9304	7882
80°	6285	7837	6376
85°	4065	6023	5356



TEST NUMBER: P845251

CATALOG NUMBER: SQ4P-PW1-050U-125D-B50-1D-UNV

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	164.2	2.7
10°-20°	463.5	7.6
20°-30°	687.5	11.3
30°-40°	804.4	13.2
40°-50°	800.9	13.1
50°-60°	691.6	11.3
60°-70°	497.8	8.2
70°-80°	261.0	4.3
80°-90°	65.4	1.1
90°-100°	102.0	1.7
100°-110°	355.0	5.8
110°-120°	343.9	5.6
120°-130°	269.8	4.4
130°-140°	213.5	3.5
140°-150°	164.8	2.7
150°-160°	118.1	1.9
160°-170°	72.3	1.2
170°-180°	24.4	0.4
0°-30°	1315.1	21.6
0°-40°	2119.5	34.7
0°-60°	3611.9	59.2
0°-90°	4436.1	72.7
90°-120°	800.9	13.1
90°-150°	1449.0	23.8
90°-180°	1664.0	27.3
0°-180°	6099.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1743	1743	1743	1743	1743	
5°	1748	1728	1734	1729	1726	166
15°	1664	1642	1645	1642	1639	469
25°	1521	1495	1493	1484	1488	699
35°	1307	1289	1289	1276	1281	817
45°	1051	1042	1037	1034	1032	811
55°	779	777	779	768	766	695
65°	493	508	518	497	481	489
75°	227	248	261	244	221	244
85°	38	50	57	54	51	51
90°	4	6	6	4	2	4
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	



TEST NUMBER: P845251

CATALOG NUMBER: SQ4P-PW1-050U-125D-B50-1D-UNV

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1743.3	1743.3	1743.3	1743.3	1743.3
2.5°	1753.2	1738.7	1743.3	1739.5	1731.1
5°	1748.0	1728.4	1734.2	1729.4	1726.5
7.5°	1730.2	1712.2	1716.2	1711.5	1709.6
10°	1714.1	1696.0	1700.3	1694.2	1691.1
12.5°	1695.8	1676.5	1680.7	1674.3	1672.8
15°	1663.5	1642.3	1645.0	1641.8	1638.9
17.5°	1626.0	1604.7	1605.0	1600.3	1599.4
20°	1598.9	1576.4	1574.3	1568.2	1571.4
22.5°	1569.5	1545.7	1543.6	1535.1	1539.3
25°	1520.6	1495.2	1493.0	1483.7	1488.2
27.5°	1464.1	1439.0	1439.0	1426.0	1430.8
30°	1422.3	1398.2	1400.9	1385.5	1391.6
32.5°	1378.1	1356.3	1357.7	1342.6	1348.7
35°	1307.1	1289.1	1288.6	1276.5	1280.9
37.5°	1234.6	1218.7	1216.0	1209.2	1210.2
40°	1184.3	1170.8	1165.8	1161.3	1161.3
42.5°	1131.3	1119.2	1114.2	1110.7	1109.6
45°	1050.6	1041.6	1036.9	1033.6	1032.1
47.5°	970.6	962.4	958.2	956.0	954.5
50°	915.6	909.5	907.9	903.1	901.6
52.5°	860.2	856.5	854.9	849.1	847.5
55°	778.7	777.3	778.7	768.1	766.5
57.5°	693.9	696.3	701.4	686.8	683.1
60°	637.6	643.4	649.8	632.8	626.7
62.5°	579.6	589.4	598.1	578.5	570.1
65°	493.0	508.1	517.6	497.2	480.8
67.5°	409.6	428.1	439.5	417.8	399.0
70°	351.6	372.8	385.5	363.5	342.6
72.5°	301.3	324.8	335.2	314.3	293.3
75°	227.4	248.4	261.0	243.6	221.1
77.5°	161.3	181.1	191.6	176.6	157.8
80°	118.3	139.3	147.5	134.8	120.0
82.5°	84.0	101.4	107.0	99.3	88.9
85°	38.4	50.3	56.9	53.8	50.6
87.5°	9.8	18.3	23.3	23.3	24.7
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



TEST NUMBER: P845251

CATALOG NUMBER: SQ4P-PW1-050U-125D-B50-1D-UNV

**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)