

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: P844951

Luminaire Tested: **SQ4P-F-100U-125D-B50-1D-UNV**

Issue Date: 8/14/2023



**Test Information**

Test Method: LM-79-08  
Report Number: P844951  
REPORT IS A COMBINATION OF REPORTS P700082 AND P700246  
Test Lab: INNOVATION CENTER  
Issue Date: 8/14/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: SQ4P-F-100U-125D-B50-1D-UNV  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, 1000 LUMENS PER FOOT UPLIGHT, 1250 LUMENS PER FOOT DOWNLIGHT  
  
Light Source: -  
Ballast/Driver: -

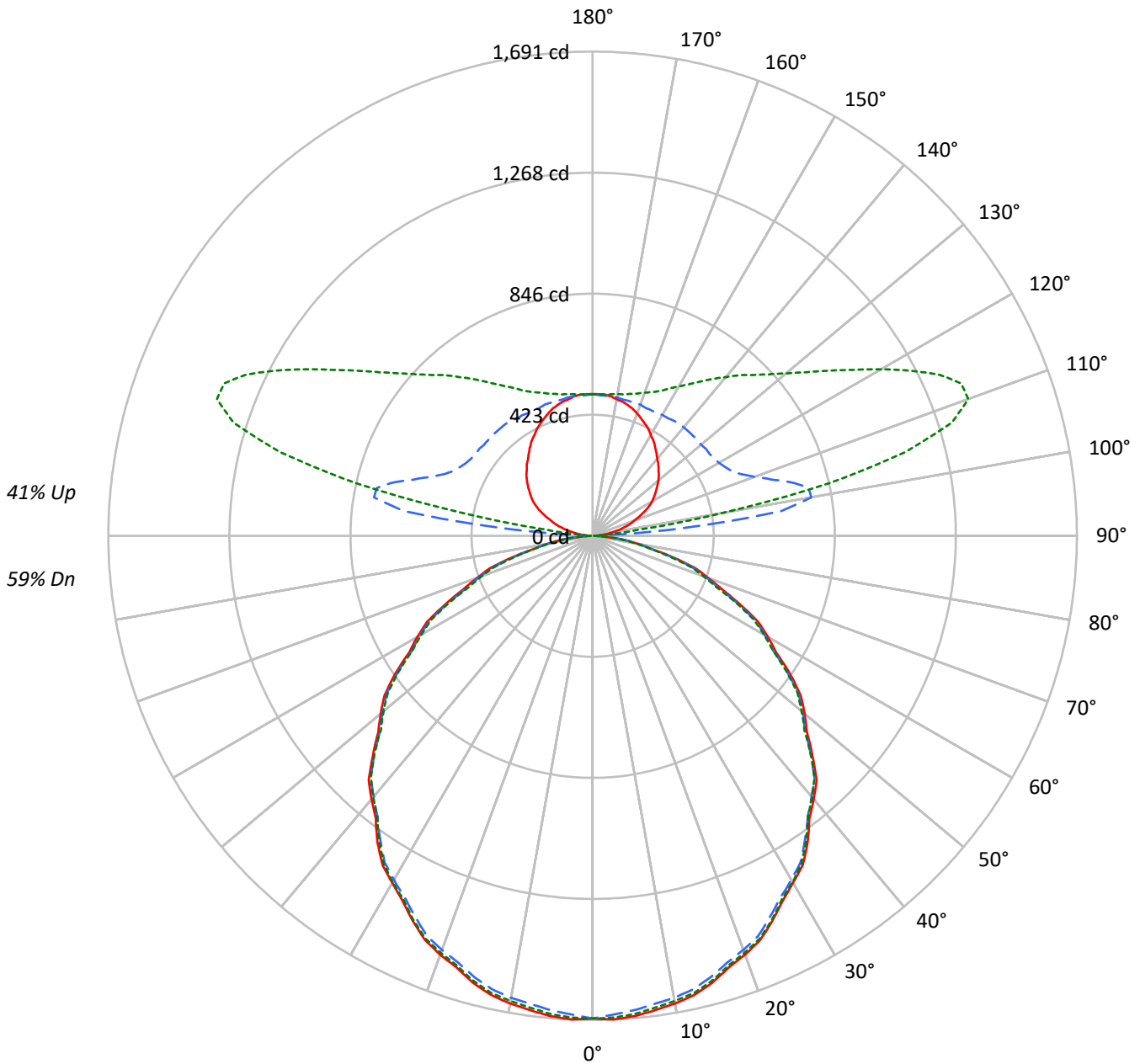
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7813.6 lumens  
Efficiency: N/A  
Efficacy: 108.8 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35  
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')  
CIE Type: General Diffuse

Input Watts (W): 71.8  
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	109	109	109	109	102	102	102	102	88	88	88	76	76	76	64	64	64	59																			
1	100	95	91	88	93	89	86	83	77	75	73	67	65	63	57	56	54	50																			
2	91	83	77	72	84	78	72	68	68	64	60	58	55	53	50	48	46	41																			
3	83	73	66	60	77	68	62	56	60	55	50	52	48	44	44	41	39	35																			
4	76	65	57	50	70	61	53	48	53	47	43	46	42	38	39	36	33	30																			
5	69	58	49	43	65	54	47	41	47	41	37	41	36	33	35	32	29	26																			
6	64	52	43	37	59	49	41	36	43	37	32	37	32	29	32	28	25	23																			
7	59	47	38	33	55	44	37	31	39	33	28	34	29	25	29	25	23	20																			
8	55	42	34	29	51	40	33	28	35	29	25	31	26	23	27	23	20	18																			
9	51	39	31	26	48	36	30	25	32	27	23	28	24	20	25	21	18	16																			
10	48	35	28	23	45	34	27	22	30	24	20	26	22	18	23	19	16	15																			

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

	0°	45°	90°
0°	15554	15554	15554
5°	15593	15405	15530
10°	15539	15348	15455
15°	15433	15239	15370
20°	15286	15110	15222
25°	15115	14933	15072
30°	14906	14786	14881
35°	14745	14567	14641
40°	14464	14324	14352
45°	14163	14046	14046
50°	13864	13736	13672
55°	13542	13359	13288
60°	13037	12828	12745
65°	12413	12169	12020
70°	11567	11319	11076
75°	10373	10056	9810
80°	8395	8283	8033
85°	4986	5748	5970



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	159.0	2.0
10°-20°	453.0	5.8
20°-30°	680.3	8.7
30°-40°	812.1	10.4
40°-50°	832.2	10.7
50°-60°	742.2	9.5
60°-70°	552.7	7.1
70°-80°	300.0	3.8
80°-90°	70.7	0.9
90°-100°	196.9	2.5
100°-110°	685.2	8.8
110°-120°	663.7	8.5
120°-130°	520.7	6.7
130°-140°	412.1	5.3
140°-150°	318.0	4.1
150°-160°	228.0	2.9
160°-170°	139.4	1.8
170°-180°	47.2	0.6
0°-30°	1292.3	16.5
0°-40°	2104.5	26.9
0°-60°	3678.9	47.1
0°-90°	4602.3	58.9
90°-120°	1545.9	19.8
90°-150°	2796.7	35.8
90°-180°	3211.0	41.1
0°-180°	7813.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1686	1686	1686	1686	1686	
5°	1684	1681	1663	1679	1677	160
15°	1616	1611	1595	1609	1609	455
25°	1485	1481	1467	1476	1481	684
35°	1309	1305	1293	1293	1300	817
45°	1086	1088	1076	1074	1076	838
55°	842	842	830	824	826	750
65°	569	567	557	551	551	563
75°	291	289	282	278	275	308
85°	47	52	54	56	56	66
90°	7	11	11	7	4	6
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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CATALOG NUMBER: SQ4P-F-100U-125D-B50-1D-UNV

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1685.8	1685.8	1685.8	1685.8	1685.8
2.5°	1691.1	1687.7	1673.2	1685.8	1684.2
5°	1683.7	1681.3	1663.4	1678.9	1676.8
7.5°	1671.3	1667.1	1649.2	1664.7	1662.3
10°	1658.6	1654.1	1638.3	1651.8	1649.7
12.5°	1642.6	1640.0	1622.3	1635.8	1635.2
15°	1615.7	1611.2	1595.4	1609.1	1609.1
17.5°	1580.6	1578.1	1562.6	1575.4	1574.1
20°	1556.9	1552.8	1539.0	1550.4	1550.4
22.5°	1528.3	1525.6	1512.2	1521.4	1523.2
25°	1484.8	1480.6	1466.9	1476.1	1480.6
27.5°	1437.2	1433.7	1422.4	1428.1	1431.4
30°	1399.2	1399.2	1387.9	1390.2	1396.8
32.5°	1364.9	1364.9	1351.8	1354.2	1357.3
35°	1309.1	1304.7	1293.3	1293.3	1299.9
37.5°	1243.8	1241.7	1234.6	1233.3	1235.1
40°	1200.9	1198.5	1189.3	1191.6	1191.6
42.5°	1157.4	1155.0	1145.9	1142.9	1146.3
45°	1085.5	1087.9	1076.5	1074.2	1076.5
47.5°	1014.9	1014.9	1005.7	999.3	1002.8
50°	965.9	965.9	957.0	952.5	952.5
52.5°	915.4	917.2	906.1	900.0	901.9
55°	841.9	841.9	830.5	823.9	826.1
57.5°	760.5	760.5	749.3	742.6	746.5
60°	706.5	706.5	695.2	688.3	690.7
62.5°	652.2	652.2	641.1	634.2	634.5
65°	568.6	566.6	557.4	550.6	550.6
67.5°	488.4	482.6	475.7	466.8	466.8
70°	428.8	426.4	419.6	410.6	410.6
72.5°	374.5	370.6	363.8	356.6	356.6
75°	291.0	288.7	282.1	277.6	275.2
77.5°	208.6	206.8	206.2	199.9	201.7
80°	158.0	158.0	155.9	151.2	151.2
82.5°	112.7	114.6	110.6	109.6	107.8
85°	47.1	51.6	54.3	56.4	56.4
87.5°	9.2	14.2	12.7	14.5	14.5
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)