

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: P845295

Luminaire Tested: **SQ4P-PW1-125U-100D-B40-1D-UNV**

Issue Date: 8/14/2023



**Test Information**

Test Method: LM-79-08  
Report Number: P845295  
REPORT IS A COMBINATION OF REPORTS P700125 AND P700247  
Test Lab: INNOVATION CENTER  
Issue Date: 8/14/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: SQ4P-PW1-125U-100D-B40-1D-UNV  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, 1250 LUMENS PER FOOT UPLIGHT, 1000 LUMENS PER FOOT DOWNLIGHT  
  
Light Source: -  
Ballast/Driver: -

**Summary**

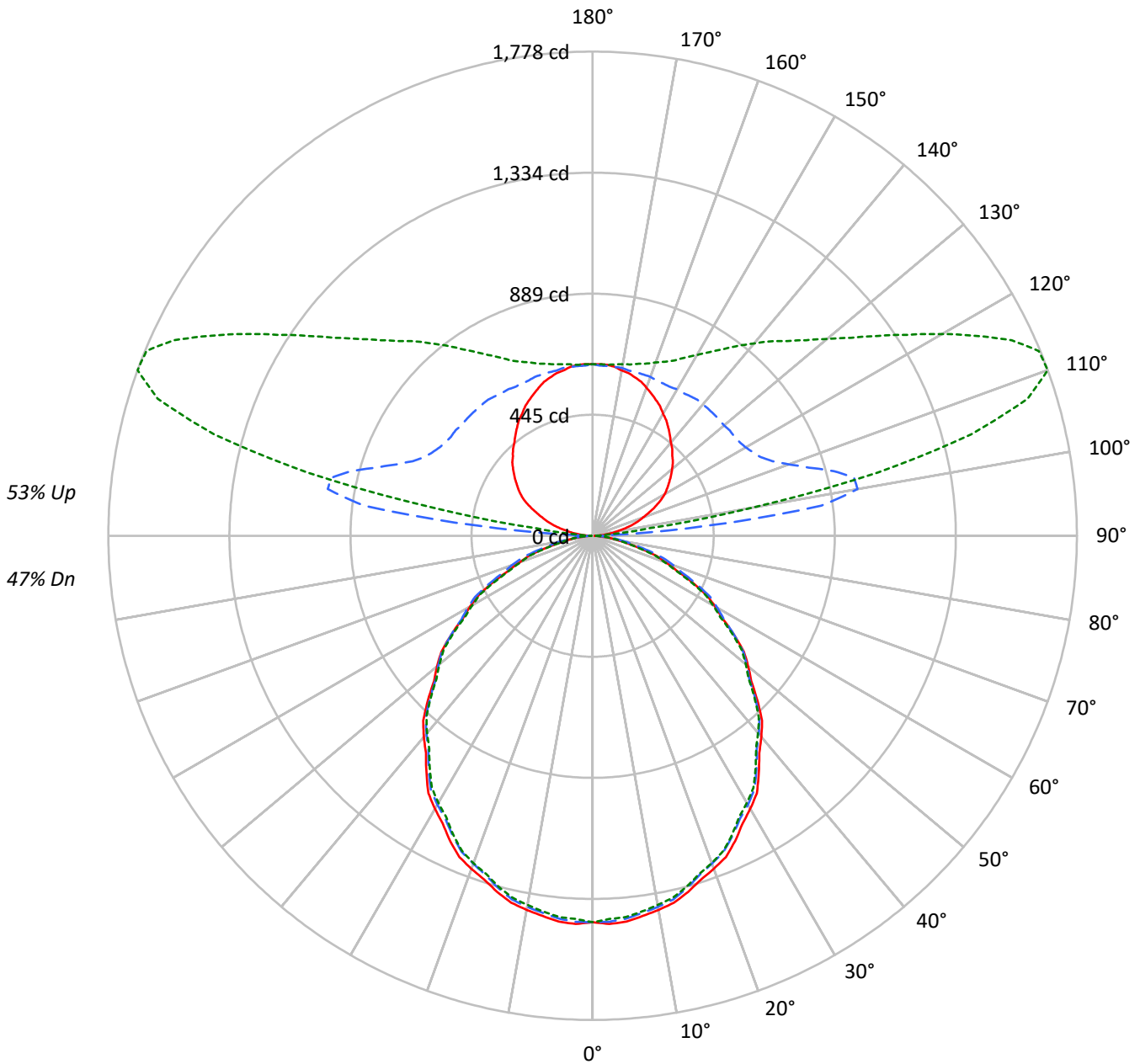
Lumens per Lamp: N/A  
Luminaire Lumens: 7701.5 lumens  
Efficiency: N/A  
Efficacy: 111.8 lumens/watt  
Spacing Criteria (0/90/45): 1.22 / 1.19 / 1.31  
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')  
CIE Type: General Diffuse

Input Watts (W): 68.9  
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	106	106	106	106	98	98	98	98	82	82	82	67	67	67	53	53	53	47				47															
1	97	93	89	86	89	86	82	79	72	69	67	59	57	56	47	46	45				40																
2	89	81	75	70	81	75	70	65	63	59	56	52	49	47	42	40	38				33																
3	81	71	64	58	74	66	60	55	56	51	47	46	42	40	37	35	33				28																
4	74	63	55	49	68	58	52	46	49	44	40	41	37	34	33	30	28				24																
5	68	56	48	42	62	52	45	40	44	39	34	37	33	29	30	27	24				21																
6	62	50	42	37	57	47	40	34	40	34	30	33	29	26	27	24	22				19																
7	58	46	38	32	53	42	35	30	36	30	26	30	26	23	25	22	19				16																
8	54	41	34	28	49	38	32	27	33	27	24	28	23	20	23	20	17				15																
9	50	38	30	25	46	35	28	24	30	25	21	25	21	18	21	18	15				13																
10	47	35	27	23	43	32	26	21	28	23	19	23	19	16	19	16	14				12																

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

	0°	45°	90°
0°	13089	13089	13089
5°	13175	13071	13013
10°	13069	12964	12894
15°	12931	12788	12740
20°	12777	12579	12557
25°	12598	12370	12330
30°	12331	12146	12065
35°	11982	11812	11741
40°	11608	11426	11382
45°	11156	11010	10959
50°	10695	10606	10531
55°	10193	10193	10034
60°	9573	9758	9411
65°	8759	9197	8542
70°	7720	8462	7521
75°	6598	7571	6417
80°	5117	6381	5186
85°	3303	4901	4361



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	133.6	1.7
10°-20°	377.2	4.9
20°-30°	559.5	7.3
30°-40°	654.7	8.5
40°-50°	651.8	8.5
50°-60°	562.8	7.3
60°-70°	405.1	5.3
70°-80°	212.4	2.8
80°-90°	54.2	0.7
90°-100°	250.8	3.3
100°-110°	872.7	11.3
110°-120°	845.4	11.0
120°-130°	663.2	8.6
130°-140°	524.9	6.8
140°-150°	405.1	5.3
150°-160°	290.4	3.8
160°-170°	177.6	2.3
170°-180°	60.1	0.8
0°-30°	1070.3	13.9
0°-40°	1724.9	22.4
0°-60°	2939.5	38.2
0°-90°	3611.3	46.9
90°-120°	1969.0	25.6
90°-150°	3562.1	46.3
90°-180°	4090.0	53.1
0°-180°	7701.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1419	1419	1419	1419	1419	
5°	1423	1407	1411	1408	1405	135
15°	1354	1337	1339	1336	1334	382
25°	1238	1217	1215	1208	1211	569
35°	1064	1049	1049	1039	1042	665
45°	855	848	844	841	840	660
55°	634	633	634	625	624	565
65°	401	414	421	405	391	398
75°	185	202	212	198	180	198
85°	31	41	46	44	41	41
90°	9	14	14	9	5	7
95°	42	146	423	108	66	45
105°	146	207	917	1547	1439	153
115°	254	306	682	1439	1698	251
125°	343	423	635	1072	1279	307
135°	414	466	630	894	1011	321
145°	484	517	626	771	837	303
155°	550	569	616	687	710	254
165°	602	607	621	649	654	170
175°	630	630	626	635	630	60
180°	630	630	630	630	630	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1418.7	1418.7	1418.7	1418.7	1418.7
2.5°	1426.8	1415.0	1418.7	1415.7	1408.7
5°	1422.6	1406.6	1411.3	1407.5	1405.1
7.5°	1408.1	1393.5	1396.7	1392.8	1391.3
10°	1395.0	1380.3	1383.8	1378.8	1376.3
12.5°	1380.1	1364.3	1367.8	1362.7	1361.3
15°	1353.8	1336.6	1338.8	1336.1	1333.8
17.5°	1323.3	1306.0	1306.2	1302.3	1301.6
20°	1301.3	1282.9	1281.2	1276.3	1278.9
22.5°	1277.3	1257.9	1256.2	1249.3	1252.8
25°	1237.5	1216.8	1215.1	1207.5	1211.2
27.5°	1191.6	1171.1	1171.1	1160.5	1164.4
30°	1157.5	1138.0	1140.1	1127.6	1132.5
32.5°	1121.6	1103.9	1104.9	1092.7	1097.7
35°	1063.8	1049.1	1048.7	1038.8	1042.4
37.5°	1004.7	991.8	989.7	984.1	985.0
40°	963.8	952.8	948.7	945.0	945.0
42.5°	920.7	910.8	906.8	903.9	903.1
45°	855.0	847.6	843.8	841.2	839.9
47.5°	789.9	783.3	779.8	778.1	776.8
50°	745.1	740.2	738.9	734.9	733.7
52.5°	700.1	697.0	695.8	691.0	689.8
55°	633.7	632.6	633.7	625.0	623.8
57.5°	564.8	566.7	570.8	559.0	556.0
60°	518.8	523.6	528.8	515.0	510.0
62.5°	471.6	479.7	486.8	470.8	463.9
65°	401.2	413.5	421.3	404.7	391.3
67.5°	333.4	348.4	357.7	340.0	324.7
70°	286.2	303.4	313.7	295.9	278.8
72.5°	245.2	264.4	272.8	255.7	238.8
75°	185.1	202.1	212.4	198.3	180.0
77.5°	131.2	147.4	156.0	143.7	128.4
80°	96.3	113.4	120.1	109.7	97.6
82.5°	68.3	82.6	87.0	80.8	72.4
85°	31.2	40.9	46.3	43.7	41.2
87.5°	7.9	14.8	19.0	19.0	20.1
90°	9.4	14.1	14.1	9.4	4.7
92.5°	23.5	70.5	65.8	28.2	23.5
95°	42.3	145.8	423.3	108.1	65.8
97.5°	65.8	164.6	846.6	385.7	207.0
100°	89.3	174.0	987.7	926.5	597.3
102.5°	117.5	188.1	983.0	1302.8	1072.4
105°	145.8	207.0	917.1	1547.4	1439.3



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	225.8	277.5	714.9	1556.8	1773.2
115°	254.0	305.7	682.0	1439.3	1697.9
117.5°	282.2	338.7	663.1	1331.1	1589.7
120°	305.7	366.9	649.1	1227.6	1481.6
122.5°	324.5	395.1	639.7	1142.9	1373.4
125°	343.3	423.3	634.9	1072.4	1279.4
127.5°	362.1	442.1	634.9	1020.6	1194.7
130°	380.9	451.5	630.3	968.9	1124.1
132.5°	399.8	456.2	630.3	931.3	1063.0
135°	413.9	465.6	630.3	893.7	1011.2
137.5°	432.7	475.0	630.3	860.7	968.9
140°	446.8	489.2	630.3	827.8	921.9
142.5°	465.6	503.2	630.3	794.8	879.5
145°	484.4	517.4	625.5	771.4	837.2
147.5°	503.2	531.4	620.9	747.8	799.6
150°	517.4	545.6	620.9	724.3	766.6
152.5°	536.2	559.7	616.1	700.8	738.4
155°	550.3	569.1	616.1	686.7	710.2
157.5°	564.4	583.2	616.1	672.6	691.4
160°	578.5	592.6	620.9	663.1	677.3
162.5°	592.6	602.1	620.9	653.7	663.1
165°	602.1	606.7	620.9	649.1	653.7
167.5°	611.5	616.1	620.9	644.3	644.3
170°	616.1	620.9	625.5	639.7	639.7
172.5°	625.5	625.5	625.5	634.9	634.9
175°	630.3	630.3	625.5	634.9	630.3
177.5°	630.3	630.3	625.5	634.9	630.3
180°	630.3	630.3	630.3	630.3	630.3



Report Generated By 670246072 / DESKTOP-50001EG







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







107.5°	174.0	230.4	832.5	1655.5	1674.4
110°	197.5	254.0	766.6	1641.5	1777.8



(END OF REPORT)