

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: P844947

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

Issue Date: 8/14/2023

**Test Information**

Test Method: LM-79-08  
Report Number: P844947  
REPORT IS A COMBINATION OF REPORTS P700081 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-100D-B40-1D-UNV  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, 1000 LUMENS PER FOOT UPLIGHT, 1000 LUMENS PER FOOT DOWNLIGHT  
  
Light Source: -  
Ballast/Driver: -

**Summary**

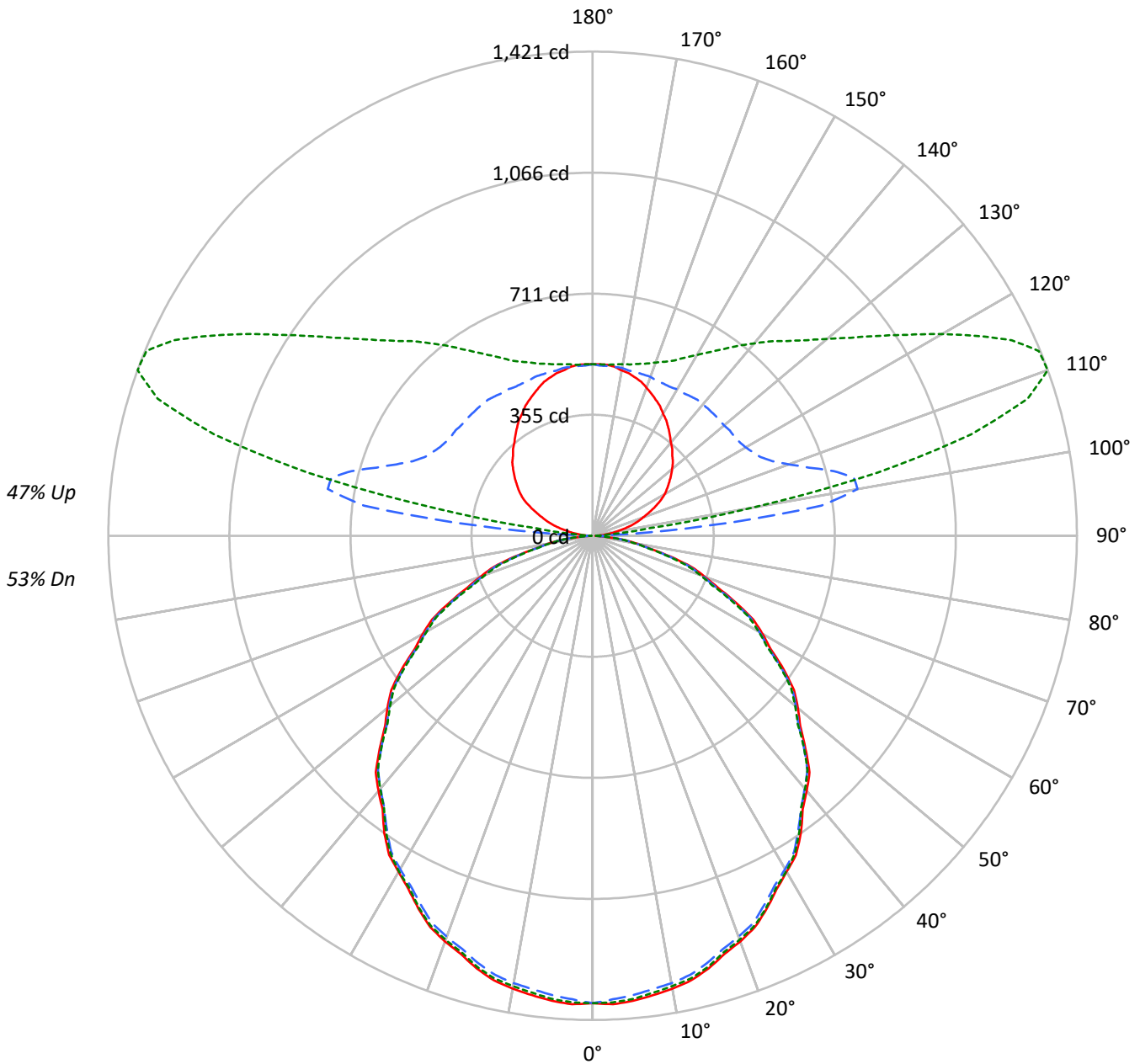
Lumens per Lamp: N/A  
Luminaire Lumens: 7014.4 lumens  
Efficiency: N/A  
Efficacy: 115.2 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35  
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')  
CIE Type: General Diffuse

Input Watts (W): 60.9  
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				20				
RC	80				70				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	72	72	72	59	59	59	53			
1	99	94	90	87	91	87	84	81	75	72	70	63	61	60	52	51	50	45			
2	90	82	76	71	83	76	71	66	65	61	58	55	52	50	46	44	42	38			
3	82	72	65	59	75	67	61	55	58	53	49	49	45	42	41	38	36	32			
4	75	64	56	50	69	59	52	47	51	46	41	43	39	36	36	33	31	27			
5	69	57	49	42	63	53	46	40	46	40	36	39	34	31	33	29	27	23			
6	63	51	43	37	58	48	40	35	41	35	31	35	31	27	30	26	23	20			
7	58	46	38	32	54	43	36	31	37	31	27	32	27	24	27	23	21	18			
8	54	42	34	28	50	39	32	27	34	28	24	29	25	21	25	21	19	16			
9	50	38	30	25	47	36	29	24	31	26	22	27	22	19	23	19	17	15			
10	47	35	28	23	44	33	26	22	29	23	19	25	20	17	21	18	15	13			

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

	0°	45°	90°
0°	12657	12657	12657
5°	12690	12537	12638
10°	12646	12491	12577
15°	12559	12402	12508
20°	12440	12297	12388
25°	12300	12153	12266
30°	12130	12032	12111
35°	12000	11854	11914
40°	11771	11656	11679
45°	11526	11431	11431
50°	11283	11177	11127
55°	11020	10872	10813
60°	10608	10439	10372
65°	10103	9903	9780
70°	9414	9212	9015
75°	8441	8185	7985
80°	6833	6742	6540
85°	4065	4679	4848



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	129.4	1.8
10°-20°	368.6	5.3
20°-30°	553.7	7.9
30°-40°	660.9	9.4
40°-50°	677.3	9.7
50°-60°	604.0	8.6
60°-70°	449.8	6.4
70°-80°	244.2	3.5
80°-90°	57.8	0.8
90°-100°	200.5	2.9
100°-110°	697.4	9.9
110°-120°	675.6	9.6
120°-130°	530.0	7.6
130°-140°	419.5	6.0
140°-150°	323.7	4.6
150°-160°	232.1	3.3
160°-170°	141.9	2.0
170°-180°	48.0	0.7
0°-30°	1051.7	15.0
0°-40°	1712.6	24.4
0°-60°	2993.9	42.7
0°-90°	3745.6	53.4
90°-120°	1573.5	22.4
90°-150°	2846.7	40.6
90°-180°	3269.0	46.6
0°-180°	7014.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1372	1372	1372	1372	1372	
5°	1370	1368	1354	1366	1365	130
15°	1315	1311	1298	1310	1310	370
25°	1208	1205	1194	1201	1205	556
35°	1065	1062	1052	1052	1058	665
45°	883	885	876	874	876	682
55°	685	685	676	670	672	610
65°	463	461	454	448	448	458
75°	237	235	230	226	224	250
85°	38	42	44	46	46	54
90°	8	11	11	8	4	6
95°	34	116	338	86	53	36
105°	116	165	733	1237	1150	122
115°	203	244	545	1150	1357	200
125°	274	338	507	857	1022	246
135°	331	372	504	714	808	256
145°	387	414	500	616	669	242
155°	440	455	492	549	568	203
165°	481	485	496	519	522	136
175°	504	504	500	507	504	48
180°	504	504	504	504	504	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1371.9	1371.9	1371.9	1371.9	1371.9
2.5°	1376.2	1373.5	1361.6	1371.9	1370.6
5°	1370.2	1368.3	1353.7	1366.4	1364.6
7.5°	1360.1	1356.7	1342.2	1354.8	1352.8
10°	1349.8	1346.2	1333.3	1344.3	1342.5
12.5°	1336.7	1334.6	1320.3	1331.2	1330.7
15°	1314.9	1311.2	1298.4	1309.5	1309.5
17.5°	1286.4	1284.2	1271.6	1282.1	1281.0
20°	1267.0	1263.7	1252.5	1261.7	1261.7
22.5°	1243.7	1241.6	1230.6	1238.2	1239.6
25°	1208.3	1204.9	1193.8	1201.3	1204.9
27.5°	1169.6	1166.8	1157.5	1162.3	1164.8
30°	1138.6	1138.6	1129.4	1131.4	1136.8
32.5°	1110.8	1110.8	1100.1	1102.0	1104.6
35°	1065.4	1061.7	1052.5	1052.5	1057.8
37.5°	1012.2	1010.5	1004.7	1003.7	1005.1
40°	977.3	975.4	967.8	969.7	969.7
42.5°	941.9	940.0	932.4	930.1	932.9
45°	883.4	885.3	876.1	874.2	876.1
47.5°	825.9	825.9	818.5	813.3	816.0
50°	786.1	786.1	778.7	775.2	775.2
52.5°	744.9	746.4	737.4	732.5	734.0
55°	685.1	685.1	675.9	670.5	672.2
57.5°	618.8	618.8	609.8	604.3	607.5
60°	574.9	574.9	565.7	560.1	562.1
62.5°	530.8	530.8	521.7	516.2	516.4
65°	462.8	461.1	453.6	448.0	448.0
67.5°	397.4	392.7	387.1	379.9	379.9
70°	349.0	347.0	341.5	334.2	334.2
72.5°	304.9	301.6	296.0	290.2	290.2
75°	236.8	234.9	229.6	226.0	224.0
77.5°	169.8	168.2	167.8	162.7	164.2
80°	128.6	128.6	126.9	123.1	123.1
82.5°	91.8	93.2	90.0	89.2	87.7
85°	38.4	42.1	44.2	45.8	45.8
87.5°	7.5	11.5	10.3	11.8	11.8
90°	7.6	11.2	11.2	7.6	3.8
92.5°	18.8	56.4	52.6	22.6	18.8
95°	33.8	116.5	338.3	86.4	52.6
97.5°	52.6	131.6	676.6	308.3	165.4
100°	71.4	139.1	789.3	740.5	477.4
102.5°	94.0	150.3	785.5	1041.2	856.9
105°	116.5	165.4	732.9	1236.6	1150.2



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	180.4	221.7	571.4	1244.1	1417.1
115°	202.9	244.3	545.0	1150.2	1356.9
117.5°	225.5	270.7	530.0	1063.7	1270.4
120°	244.3	293.1	518.7	981.0	1184.0
122.5°	259.3	315.7	511.2	913.3	1097.6
125°	274.3	338.3	507.4	856.9	1022.4
127.5°	289.5	353.3	507.4	815.7	954.7
130°	304.5	360.9	503.6	774.3	898.3
132.5°	319.5	364.6	503.6	744.2	849.5
135°	330.7	372.1	503.6	714.2	808.1
137.5°	345.8	379.6	503.6	687.8	774.3
140°	357.1	390.9	503.6	661.5	736.7
142.5°	372.1	402.2	503.6	635.2	702.9
145°	387.1	413.5	499.9	616.4	669.0
147.5°	402.2	424.7	496.2	597.6	639.0
150°	413.5	436.0	496.2	578.8	612.6
152.5°	428.5	447.3	492.4	560.0	590.2
155°	439.8	454.8	492.4	548.8	567.6
157.5°	451.0	466.1	492.4	537.5	552.6
160°	462.3	473.6	496.2	530.0	541.2
162.5°	473.6	481.1	496.2	522.4	530.0
165°	481.1	484.9	496.2	518.7	522.4
167.5°	488.6	492.4	496.2	515.0	515.0
170°	492.4	496.2	499.9	511.2	511.2
172.5°	499.9	499.9	499.9	507.4	507.4
175°	503.6	503.6	499.9	507.4	503.6
177.5°	503.6	503.6	499.9	507.4	503.6
180°	503.6	503.6	503.6	503.6	503.6



Report Generated By 670246072 / DESKTOP-50001EG







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







107.5°	139.1	184.2	665.3	1323.1	1338.1
110°	157.9	202.9	612.6	1311.8	1420.7



(END OF REPORT)