

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: P845007

Luminaire Tested: **SQ4P-PC3-075U-100D-B40-1D-UNV**

Issue Date: 8/14/2023

**Test Information**

Test Method: LM-79-08  
Report Number: P845007  
REPORT IS A COMBINATION OF REPORTS P700225 AND P700245  
Test Lab: INNOVATION CENTER  
Issue Date: 8/14/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: SQ4P-PC3-075U-100D-B40-1D-UNV  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, 750 LUMENS PER FOOT UPLIGHT, 1000 LUMENS PER FOOT DOWNLIGHT  
  
Light Source: -  
Ballast/Driver: -

**Summary**

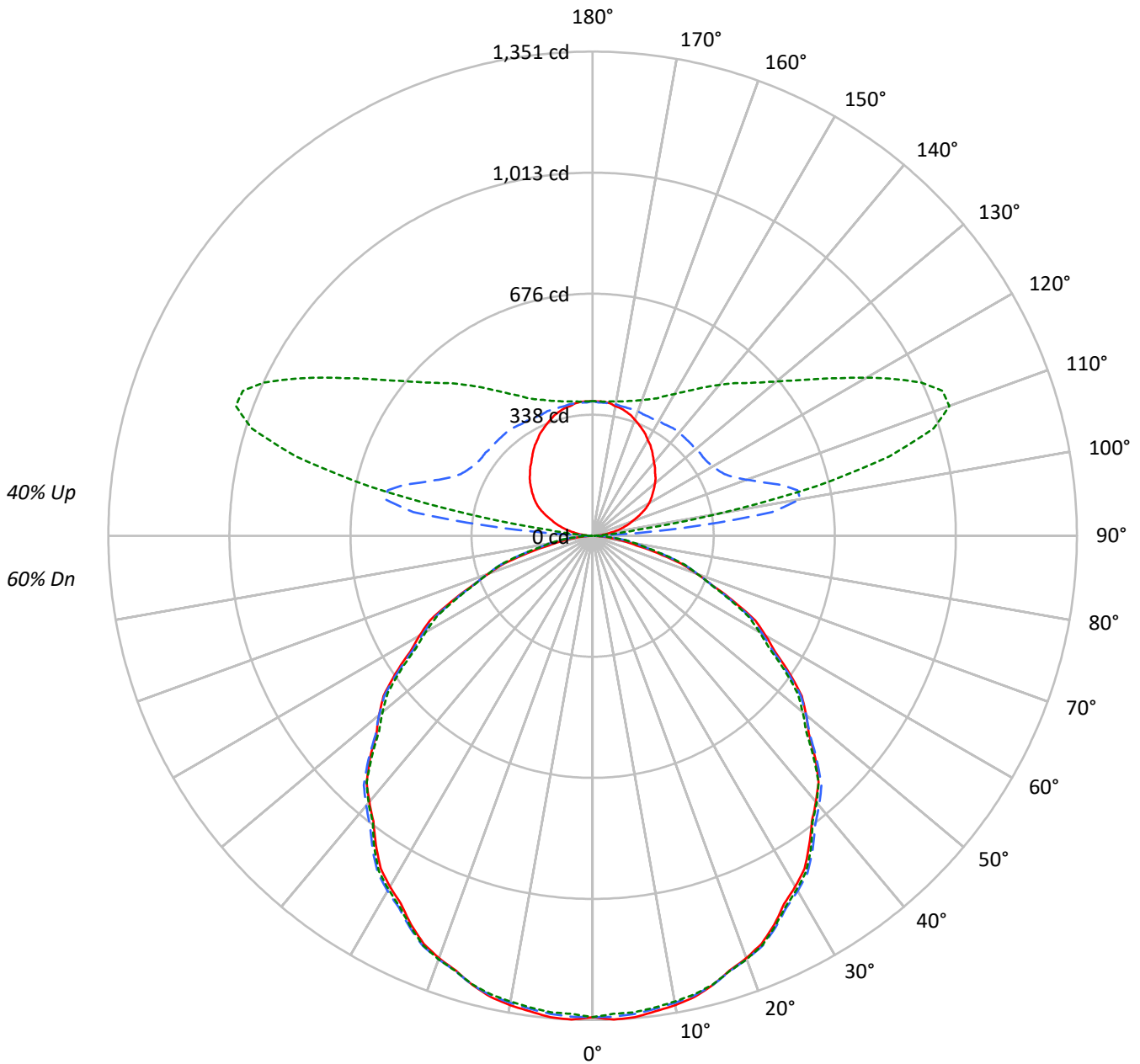
Lumens per Lamp: N/A  
Luminaire Lumens: 6103.4 lumens  
Efficiency: N/A  
Efficacy: 113.2 lumens/watt  
Spacing Criteria (0/90/45): 1.26 / 1.26 / 1.37  
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')  
CIE Type: Semi-Direct

Input Watts (W): 53.9  
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	110	110	110	110	102	102	102	102	89	89	89	77	77	77	65	65	65	60																			
1	100	96	92	88	93	90	86	83	78	76	73	68	66	64	58	57	55	51																			
2	91	84	77	72	85	78	73	68	69	64	61	59	56	54	51	49	47	43																			
3	83	74	66	60	77	69	62	57	60	55	51	53	49	45	45	42	40	36																			
4	76	65	57	51	71	61	54	48	54	48	43	47	42	39	40	37	34	31																			
5	70	58	50	44	65	55	47	42	48	42	38	42	37	34	36	33	30	27																			
6	64	52	44	38	60	49	42	36	43	37	33	38	33	29	33	29	26	23																			
7	60	47	39	33	55	44	37	32	39	33	29	34	30	26	30	26	23	21																			
8	55	43	35	29	52	40	33	28	36	30	26	32	27	23	28	24	21	18																			
9	51	39	31	26	48	37	30	25	33	27	23	29	24	21	25	22	19	17																			
10	48	36	28	24	45	34	27	23	30	25	21	27	22	19	24	20	17	15																			

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

	0°	45°	90°
0°	12392	12392	12392
5°	12487	12406	12360
10°	12457	12398	12363
15°	12391	12391	12378
20°	12310	12346	12346
25°	12194	12281	12243
30°	12044	12190	12136
35°	11866	12047	11963
40°	11668	11833	11714
45°	11459	11539	11359
50°	11158	11158	10980
55°	10805	10663	10505
60°	10282	10077	9913
65°	9501	9315	9230
70°	8322	8387	8357
75°	6695	7408	7450
80°	4761	6275	6344
85°	2901	5261	5261



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	127.1	2.1
10°-20°	364.8	6.0
20°-30°	552.5	9.1
30°-40°	662.3	10.9
40°-50°	675.3	11.1
50°-60°	589.5	9.7
60°-70°	422.0	6.9
70°-80°	217.4	3.6
80°-90°	55.9	0.9
90°-100°	149.4	2.4
100°-110°	519.9	8.5
110°-120°	503.6	8.3
120°-130°	395.1	6.5
130°-140°	312.7	5.1
140°-150°	241.3	4.0
150°-160°	173.0	2.8
160°-170°	105.8	1.7
170°-180°	35.8	0.6
0°-30°	1044.4	17.1
0°-40°	1706.7	28.0
0°-60°	2971.6	48.7
0°-90°	3666.9	60.1
90°-120°	1172.9	19.2
90°-150°	2122.0	34.8
90°-180°	2437.0	39.9
0°-180°	6103.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1343	1343	1343	1343	1343	
5°	1348	1335	1340	1336	1335	128
15°	1297	1286	1297	1297	1296	366
25°	1198	1189	1206	1203	1203	551
35°	1054	1051	1070	1062	1062	659
45°	878	876	884	873	871	676
55°	672	663	663	653	653	599
65°	435	426	427	423	423	430
75°	188	196	208	209	209	203
85°	27	42	50	51	50	37
90°	6	8	8	6	3	5
95°	25	87	252	64	39	27
105°	87	123	546	922	857	91
115°	151	182	406	857	1011	149
125°	205	252	378	639	762	183
135°	246	277	375	532	602	191
145°	289	308	373	460	499	181
155°	328	339	367	409	423	151
165°	359	362	370	387	390	101
175°	375	375	373	378	375	36
180°	375	375	375	375	375	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1343.1	1343.1	1343.1	1343.1	1343.1
2.5°	1351.3	1339.5	1343.1	1340.1	1335.2
5°	1348.3	1334.8	1339.5	1335.7	1334.6
7.5°	1338.5	1325.1	1331.4	1328.8	1327.5
10°	1329.7	1316.1	1323.4	1320.8	1319.6
12.5°	1317.6	1305.2	1313.4	1310.9	1310.6
15°	1297.3	1286.3	1297.3	1297.3	1295.9
17.5°	1271.5	1261.7	1273.3	1274.1	1273.3
20°	1253.8	1242.8	1257.4	1256.1	1257.4
22.5°	1231.9	1222.9	1238.6	1235.3	1236.6
25°	1197.8	1189.2	1206.4	1202.7	1202.7
27.5°	1157.4	1151.2	1170.1	1166.1	1166.1
30°	1130.5	1124.5	1144.2	1139.2	1139.2
32.5°	1100.7	1096.6	1115.5	1109.5	1109.5
35°	1053.5	1050.9	1069.6	1062.1	1062.1
37.5°	1004.6	1002.5	1019.5	1010.4	1007.4
40°	968.8	967.7	982.5	972.6	972.6
42.5°	933.0	931.8	944.8	932.8	932.8
45°	878.2	875.5	884.4	873.0	870.6
47.5°	818.1	815.8	821.1	808.9	807.6
50°	777.4	774.8	777.4	766.0	765.0
52.5°	735.5	731.1	731.4	720.3	720.1
55°	671.7	663.1	662.9	653.1	653.1
57.5°	603.9	592.8	593.8	585.3	584.0
60°	557.2	545.0	546.1	538.5	537.2
62.5°	511.3	497.4	500.1	491.8	491.6
65°	435.2	425.5	426.7	422.8	422.8
67.5°	362.1	353.1	359.7	356.7	356.5
70°	308.5	302.3	310.9	310.9	309.8
72.5°	258.7	258.5	269.0	269.0	269.9
75°	187.8	196.3	207.8	209.0	209.0
77.5°	125.4	140.4	153.1	153.5	153.3
80°	89.6	106.6	118.1	120.7	119.4
82.5°	60.7	78.7	88.3	90.7	89.6
85°	27.4	42.1	49.7	51.1	49.7
87.5°	7.9	16.8	20.0	20.0	18.0
90°	5.6	8.4	8.4	5.6	2.8
92.5°	14.1	42.1	39.2	16.8	14.1
95°	25.2	86.8	252.2	64.4	39.2
97.5°	39.2	98.1	504.3	229.8	123.3
100°	53.2	103.7	588.3	552.0	355.8
102.5°	70.1	112.0	585.6	776.1	638.8
105°	86.8	123.3	546.4	921.8	857.3



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	134.5	165.3	425.9	927.4	1056.3
115°	151.3	182.1	406.2	857.3	1011.4
117.5°	168.1	201.8	395.1	792.9	947.0
120°	182.1	218.5	386.7	731.3	882.5
122.5°	193.3	235.4	381.0	680.9	818.1
125°	204.6	252.2	378.2	638.8	762.1
127.5°	215.7	263.4	378.2	608.0	711.7
130°	227.0	269.0	375.4	577.2	669.6
132.5°	238.1	271.7	375.4	554.8	633.2
135°	246.5	277.3	375.4	532.3	602.4
137.5°	257.8	283.0	375.4	512.7	577.2
140°	266.2	291.4	375.4	493.1	549.2
142.5°	277.3	299.8	375.4	473.5	523.9
145°	288.6	308.2	372.6	459.5	498.7
147.5°	299.8	316.6	369.8	445.5	476.3
150°	308.2	325.0	369.8	431.4	456.7
152.5°	319.4	333.4	367.0	417.5	439.9
155°	327.8	339.0	367.0	409.0	423.1
157.5°	336.2	347.4	367.0	400.6	411.9
160°	344.6	353.0	369.8	395.1	403.4
162.5°	353.0	358.7	369.8	389.5	395.1
165°	358.7	361.5	369.8	386.7	389.5
167.5°	364.3	367.0	369.8	383.8	383.8
170°	367.0	369.8	372.6	381.0	381.0
172.5°	372.6	372.6	372.6	378.2	378.2
175°	375.4	375.4	372.6	378.2	375.4
177.5°	375.4	375.4	372.6	378.2	375.4
180°	375.4	375.4	375.4	375.4	375.4



Report Generated By 670246072 / DESKTOP-50001EG







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







107.5°	103.7	137.3	495.9	986.2	997.5
110°	117.6	151.3	456.7	977.8	1059.1



(END OF REPORT)