

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: P845028

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

Issue Date: 8/14/2023

**Test Information**

Test Method: LM-79-08  
Report Number: P845028  
REPORT IS A COMBINATION OF REPORTS P700084 AND P700246  
Test Lab: INNOVATION CENTER  
Issue Date: 8/14/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: SQ4P-PC3-100U-075D-B40-1D-UNV  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, 1000 LUMENS PER FOOT UPLIGHT, 750 LUMENS PER FOOT DOWNLIGHT  
  
Light Source: -  
Ballast/Driver: -

**Summary**

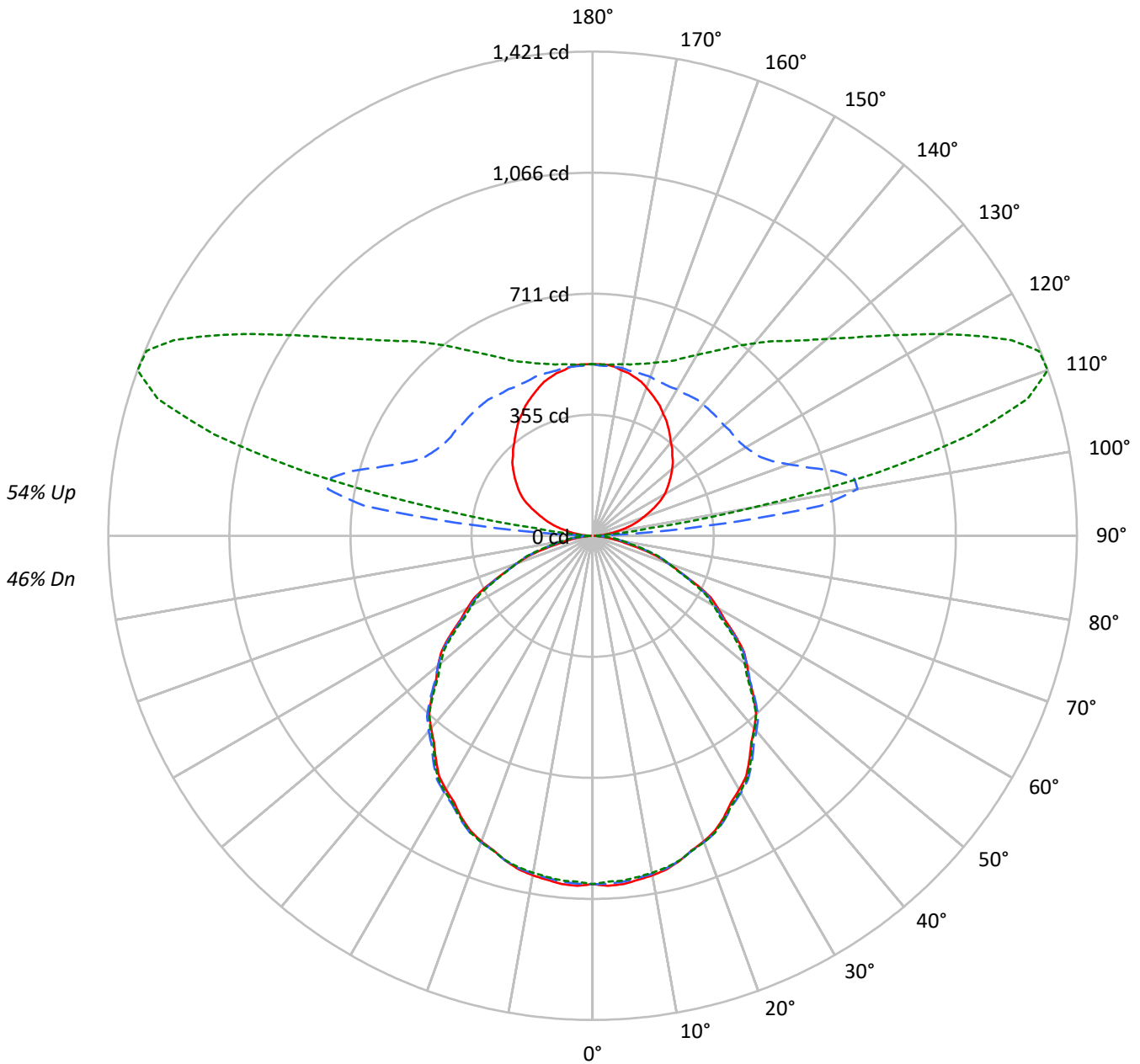
Lumens per Lamp: N/A  
Luminaire Lumens: 6059.9 lumens  
Efficiency: N/A  
Efficacy: 117.4 lumens/watt  
Spacing Criteria (0/90/45): 1.26 / 1.26 / 1.37  
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')  
CIE Type: General Diffuse

Input Watts (W): 51.6  
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	106	106	106	106	97	97	97	97	81	81	81	66	66	66	53	53	53	46			46
1	97	93	89	85	89	85	82	79	71	69	67	58	57	55	46	45	44	39			39
2	88	81	75	70	81	74	69	65	62	59	55	51	49	46	41	39	37	33			33
3	81	71	64	58	74	66	59	54	55	50	46	45	42	39	36	34	32	28			28
4	74	63	55	49	67	58	51	46	49	44	39	40	36	33	32	30	27	24			24
5	68	56	48	42	62	52	45	39	44	38	34	36	32	29	29	26	24	20			20
6	62	50	42	36	57	46	39	34	39	34	30	33	28	25	26	23	21	18			18
7	57	45	37	32	53	42	35	30	36	30	26	30	25	22	24	21	19	16			16
8	53	41	33	28	49	38	31	26	32	27	23	27	23	20	22	19	17	14			14
9	50	37	30	25	45	35	28	23	30	24	21	25	21	18	20	17	15	13			13
10	46	34	27	22	42	32	25	21	27	22	18	23	19	16	19	16	14	12			12

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

	0°	45°	90°
0°	9431	9431	9431
5°	9503	9441	9407
10°	9480	9435	9408
15°	9430	9430	9421
20°	9368	9395	9395
25°	9280	9346	9318
30°	9165	9277	9237
35°	9030	9168	9104
40°	8880	9005	8916
45°	8720	8781	8644
50°	8491	8491	8355
55°	8223	8115	7993
60°	7826	7667	7543
65°	7230	7086	7023
70°	6334	6380	6361
75°	5094	5636	5671
80°	3624	4777	4830
85°	2212	4012	4012



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	96.7	1.6
10°-20°	277.6	4.6
20°-30°	420.4	6.9
30°-40°	504.1	8.3
40°-50°	513.9	8.5
50°-60°	448.6	7.4
60°-70°	321.2	5.3
70°-80°	165.5	2.7
80°-90°	43.1	0.7
90°-100°	200.5	3.3
100°-110°	697.4	11.5
110°-120°	675.6	11.1
120°-130°	530.0	8.7
130°-140°	419.5	6.9
140°-150°	323.7	5.3
150°-160°	232.1	3.8
160°-170°	141.9	2.3
170°-180°	48.0	0.8
0°-30°	794.8	13.1
0°-40°	1298.9	21.4
0°-60°	2261.4	37.3
0°-90°	2791.1	46.1
90°-120°	1573.5	26.0
90°-150°	2846.7	47.0
90°-180°	3269.0	53.9
0°-180°	6059.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1022	1022	1022	1022	1022	
5°	1026	1016	1019	1016	1016	97
15°	987	979	987	987	986	278
25°	912	905	918	915	915	420
35°	802	800	814	808	808	501
45°	668	666	673	664	662	514
55°	511	505	504	497	497	456
65°	331	324	325	322	322	328
75°	143	149	158	159	159	154
85°	21	32	38	39	38	28
90°	8	11	11	8	4	5
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°	1022.2	1022.2	1022.2	1022.2	1022.2
2.5°	1028.4	1019.4	1022.2	1019.9	1016.2
5°	1026.1	1015.8	1019.4	1016.5	1015.7
7.5°	1018.6	1008.5	1013.3	1011.2	1010.2
10°	1011.9	1001.6	1007.1	1005.2	1004.2
12.5°	1002.8	993.3	999.5	997.7	997.4
15°	987.3	978.9	987.3	987.3	986.3
17.5°	967.7	960.1	969.0	969.6	969.0
20°	954.1	945.8	956.9	956.0	956.9
22.5°	937.5	930.7	942.5	940.1	941.1
25°	911.6	905.0	918.1	915.3	915.3
27.5°	880.9	876.1	890.5	887.4	887.4
30°	860.3	855.8	870.8	867.0	867.0
32.5°	837.7	834.6	848.9	844.3	844.3
35°	801.7	799.8	814.0	808.3	808.3
37.5°	764.6	762.9	775.8	769.0	766.7
40°	737.3	736.5	747.7	740.3	740.3
42.5°	710.0	709.1	719.0	709.9	709.9
45°	668.3	666.3	673.0	664.4	662.5
47.5°	622.6	620.8	624.9	615.5	614.6
50°	591.6	589.7	591.6	583.0	582.1
52.5°	559.8	556.3	556.7	548.2	548.0
55°	511.2	504.7	504.5	496.9	496.9
57.5°	459.6	451.1	452.0	445.4	444.4
60°	424.1	414.8	415.5	409.8	408.8
62.5°	389.2	378.5	380.6	374.3	374.2
65°	331.2	323.9	324.6	321.7	321.7
67.5°	275.6	268.7	273.8	271.5	271.3
70°	234.8	230.1	236.5	236.5	235.8
72.5°	196.9	196.7	204.8	204.8	205.4
75°	142.9	149.4	158.1	159.1	159.1
77.5°	95.5	106.9	116.5	116.8	116.7
80°	68.2	81.1	89.9	91.9	90.9
82.5°	46.1	59.9	67.3	69.0	68.2
85°	20.9	32.0	37.9	38.9	37.9
87.5°	6.0	12.7	15.2	15.2	13.7
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)