

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: P844860

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

Issue Date: 8/14/2023

**Test Information**

Test Method: LM-79-08  
Report Number: P844860  
REPORT IS A COMBINATION OF REPORTS P700076 AND P700246  
Test Lab: INNOVATION CENTER  
Issue Date: 8/14/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: SQ4P-BB-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**

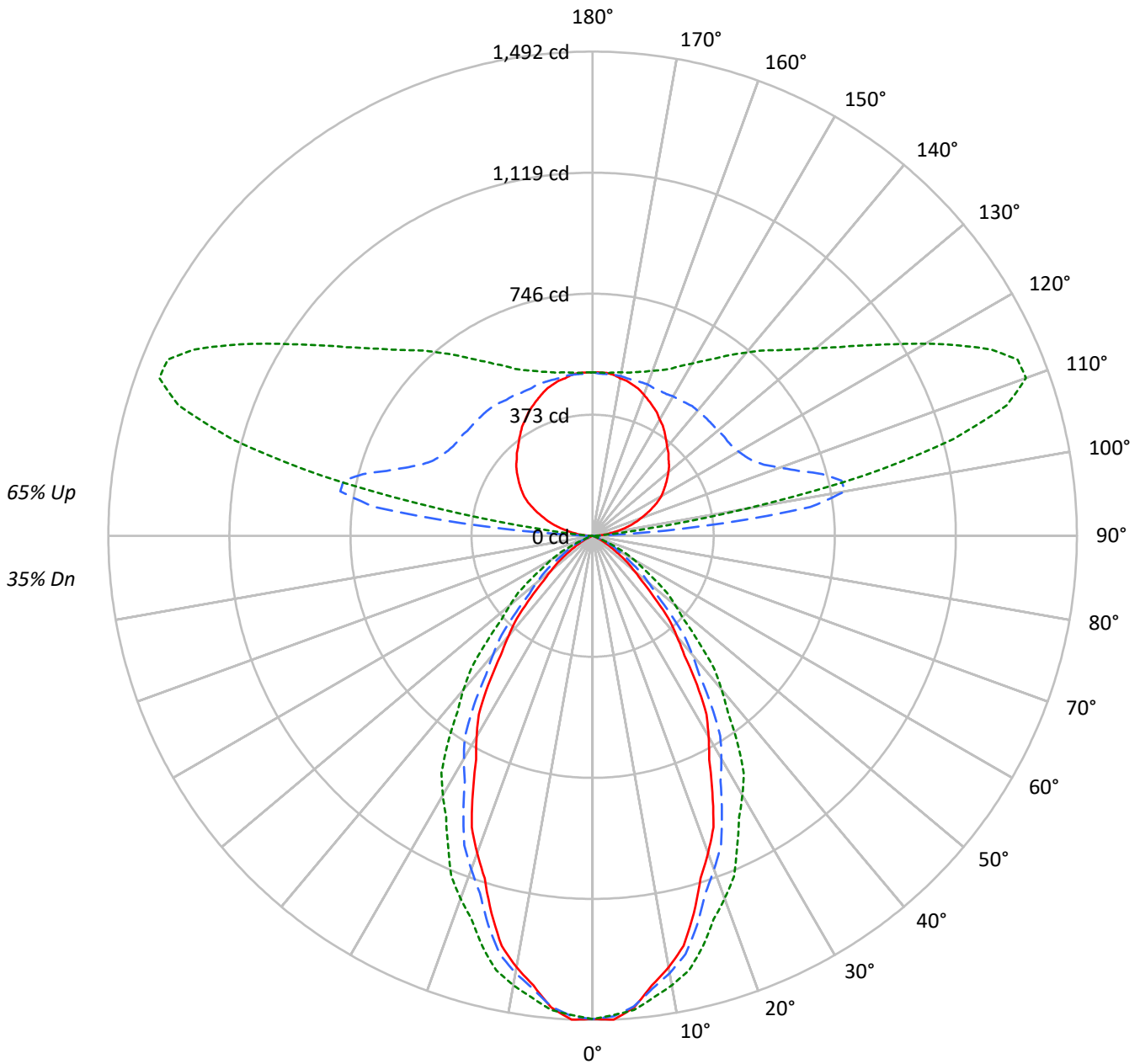
Lumens per Lamp: N/A  
Luminaire Lumens: 5046.2 lumens  
Efficiency: N/A  
Efficacy: 97.8 lumens/watt  
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97  
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')  
CIE Type: Semi-Indirect

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									
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	104	104	104	104	94	94	94	94	75	75	75	58	58	58	43	43	43	35																			
1	96	92	89	86	87	83	81	78	68	66	64	53	52	51	39	39	38	32																			
2	88	82	76	72	80	74	70	66	61	58	55	48	46	44	36	35	34	29																			
3	81	73	67	62	74	67	61	57	55	51	48	44	41	39	33	32	31	26																			
4	75	65	59	53	68	60	54	49	50	45	42	40	37	35	31	29	28	24																			
5	69	59	52	46	63	54	48	43	45	40	37	36	33	31	28	27	25	22																			
6	64	53	46	41	58	49	43	38	41	36	33	33	30	28	26	24	23	20																			
7	60	49	41	36	54	45	39	34	38	33	30	31	28	25	24	22	21	18																			
8	56	44	37	33	51	41	35	31	35	30	27	28	25	23	23	21	19	17																			
9	52	41	34	29	47	38	32	28	32	27	24	26	23	21	21	19	18	15																			
10	49	38	31	27	44	35	29	25	30	25	22	25	21	19	20	18	16	14																			

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

	0°	45°	90°
0°	13739	13739	13739
5°	13517	13484	13585
10°	12647	12816	13174
15°	11498	11863	12523
20°	10207	10737	11677
25°	8887	9592	10730
30°	7614	8450	9831
35°	6312	7173	8746
40°	4849	5735	7452
45°	3507	4344	5997
50°	2388	3235	4757
55°	1552	2340	3696
60°	891	1648	2674
65°	236	1006	1354
70°	119	310	386
75°	53	25	0
80°	37	0	0
85°	0	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	135.9	2.7
10°-20°	347.5	6.9
20°-30°	435.1	8.6
30°-40°	401.8	8.0
40°-50°	270.0	5.4
50°-60°	139.5	2.8
60°-70°	43.7	0.9
70°-80°	2.8	0.1
80°-90°	1.3	0.0
90°-100°	200.5	4.0
100°-110°	697.4	13.8
110°-120°	675.6	13.4
120°-130°	530.0	10.5
130°-140°	419.5	8.3
140°-150°	323.7	6.4
150°-160°	232.1	4.6
160°-170°	141.9	2.8
170°-180°	48.0	1.0
0°-30°	918.5	18.2
0°-40°	1320.3	26.2
0°-60°	1729.8	34.3
0°-90°	1777.5	35.2
90°-120°	1573.5	31.2
90°-150°	2846.7	56.4
90°-180°	3269.0	64.8
0°-180°	5046.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1489	1489	1489	1489	1489	
5°	1460	1445	1456	1461	1467	135
15°	1204	1200	1242	1284	1311	335
25°	873	880	942	1007	1054	400
35°	560	575	637	712	776	347
45°	269	285	333	398	460	211
55°	96	113	146	187	230	90
65°	11	21	46	56	62	18
75°	2	2	1	0	0	2
85°	0	0	0	0	0	0
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°	1489.1	1489.1	1489.1	1489.1	1489.1
2.5°	1492.5	1478.5	1482.1	1482.1	1478.1
5°	1459.5	1444.7	1455.9	1461.1	1466.8
7.5°	1397.9	1386.3	1407.9	1423.8	1435.6
10°	1349.9	1340.1	1368.0	1389.9	1406.2
12.5°	1294.7	1287.0	1320.7	1351.0	1371.6
15°	1203.8	1199.6	1242.0	1283.5	1311.1
17.5°	1106.5	1106.3	1154.5	1206.4	1239.5
20°	1039.6	1041.7	1093.6	1150.7	1189.3
22.5°	972.7	977.6	1033.0	1092.6	1136.9
25°	873.0	880.1	942.2	1006.8	1054.0
27.5°	777.5	787.8	853.2	920.0	977.6
30°	714.7	726.6	793.2	863.6	922.8
32.5°	652.9	667.2	731.9	806.6	866.8
35°	560.4	574.6	636.9	711.8	776.5
37.5°	465.0	478.7	539.5	613.4	683.4
40°	402.6	418.2	476.2	547.7	618.7
42.5°	346.2	361.8	416.2	486.5	553.7
45°	268.8	284.9	332.9	397.6	459.6
47.5°	204.6	222.0	264.1	322.8	379.2
50°	166.4	183.9	225.4	277.1	331.4
52.5°	135.9	153.0	190.3	239.0	288.7
55°	96.5	112.7	145.5	186.9	229.8
57.5°	66.7	80.7	110.1	144.5	178.3
60°	48.3	61.6	89.3	117.3	144.9
62.5°	32.2	44.4	71.4	92.9	111.4
65°	10.8	20.7	46.1	55.6	62.0
67.5°	5.5	6.5	24.1	25.6	27.7
70°	4.4	4.4	11.5	12.2	14.3
72.5°	3.1	3.1	4.6	5.9	6.4
75°	1.5	1.5	0.7	0.0	0.0
77.5°	0.7	0.7	0.7	0.0	0.0
80°	0.7	0.7	0.0	0.0	0.0
82.5°	0.2	0.2	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0
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)