

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: P845193

Luminaire Tested: **SQ4P-PR1-100U-050D-B40-1D-UNV**

Issue Date: 8/14/2023

**Test Information**

Test Method: LM-79-08  
Report Number: P845193  
REPORT IS A COMBINATION OF REPORTS P700091 AND P700246  
Test Lab: INNOVATION CENTER  
Issue Date: 8/14/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: SQ4P-PR1-100U-050D-B40-1D-UNV  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, 1000 LUMENS PER FOOT  
UPLIGHT, 500 LUMENS PER FOOT DOWNLIGHT  
  
Light Source: -  
Ballast/Driver: -

**Summary**

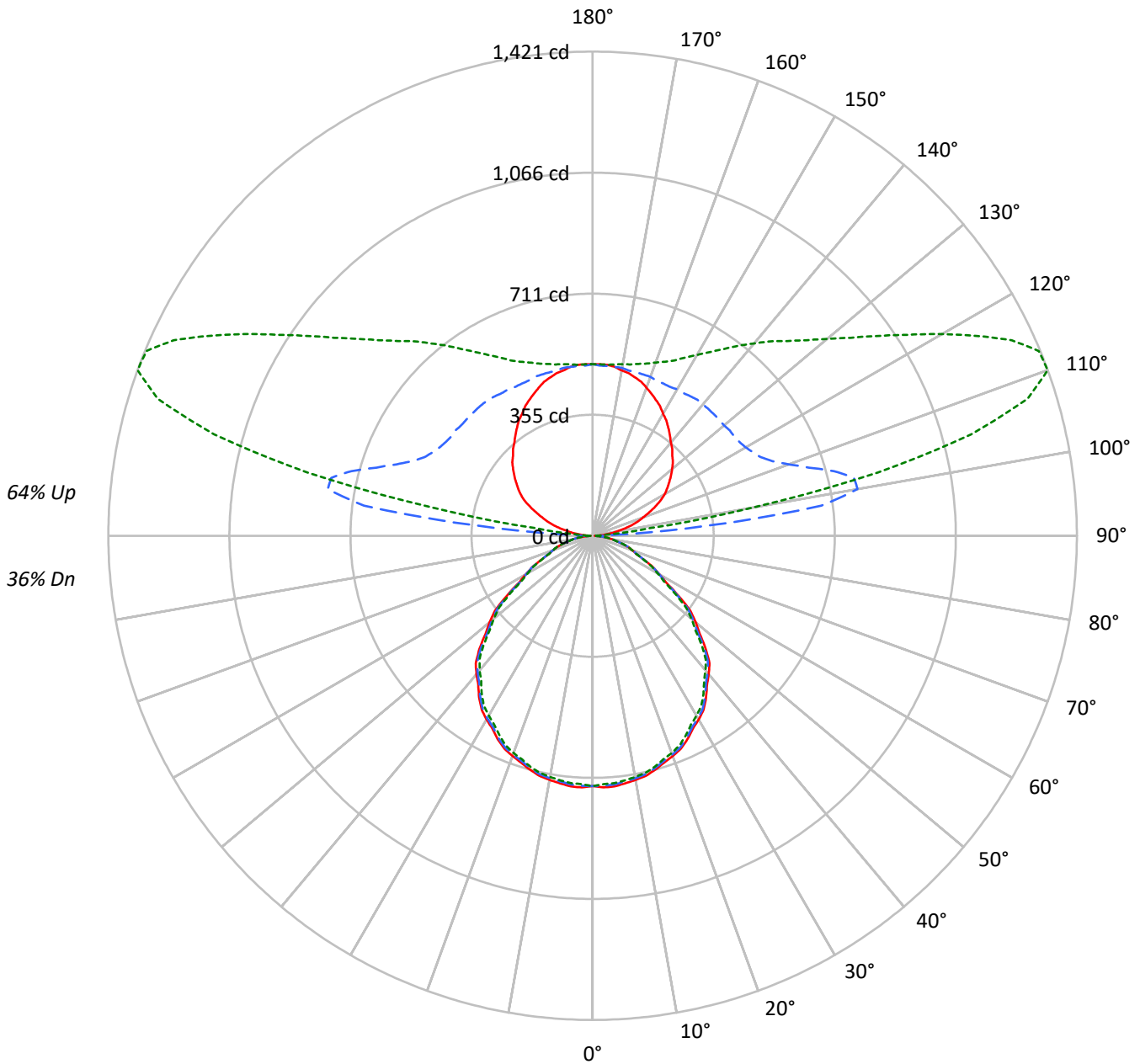
Lumens per Lamp: N/A  
Luminaire Lumens: 5106.4 lumens  
Efficiency: N/A  
Efficacy: 119.3 lumens/watt  
Spacing Criteria (0/90/45): 1.26 / 1.24 / 1.35  
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')  
CIE Type: Semi-Indirect

Input Watts (W): 42.8  
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	104	104	104	104	94	94	94	94	76	76	76	59	59	59	43	43	43	36								
1	95	91	87	84	86	82	79	76	66	64	62	52	50	49	39	38	37	31								
2	87	79	74	69	78	72	67	63	58	55	52	46	43	41	34	33	31	26								
3	79	70	63	57	71	64	58	53	52	47	44	41	38	35	30	29	27	22								
4	72	62	54	49	65	56	50	45	46	41	37	36	33	30	27	25	23	19								
5	66	55	47	42	60	50	43	38	41	36	32	33	29	26	25	22	20	17								
6	61	49	42	36	55	45	38	33	37	32	28	29	26	23	22	20	18	15								
7	56	45	37	31	51	41	34	29	34	28	25	27	23	20	20	18	16	13								
8	52	40	33	28	47	37	30	26	31	25	22	24	21	18	19	16	14	12								
9	49	37	30	25	44	34	27	23	28	23	20	22	19	16	17	15	13	11								
10	45	34	27	22	41	31	25	20	26	21	18	21	17	15	16	14	12	10								

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

	0°	45°	90°
0°	6777	6777	6777
5°	6839	6786	6751
10°	6817	6769	6734
15°	6787	6744	6708
20°	6752	6709	6659
25°	6706	6661	6583
30°	6632	6586	6491
35°	6536	6477	6385
40°	6386	6317	6204
45°	6126	6019	5895
50°	5667	5530	5421
55°	4946	4835	4734
60°	4168	4133	4052
65°	3604	3620	3589
70°	3310	3329	3329
75°	3183	3183	3201
80°	2991	3029	2991
85°	2414	2678	2678



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	69.5	1.4
10°-20°	198.8	3.9
20°-30°	299.8	5.9
30°-40°	357.2	7.0
40°-50°	352.1	6.9
50°-60°	269.1	5.3
60°-70°	166.5	3.3
70°-80°	94.6	1.9
80°-90°	30.0	0.6
90°-100°	200.5	3.9
100°-110°	697.4	13.7
110°-120°	675.6	13.2
120°-130°	530.0	10.4
130°-140°	419.5	8.2
140°-150°	323.7	6.3
150°-160°	232.1	4.5
160°-170°	141.9	2.8
170°-180°	48.0	0.9
0°-30°	568.0	11.1
0°-40°	925.2	18.1
0°-60°	1546.5	30.3
0°-90°	1837.6	36.0
90°-120°	1573.5	30.8
90°-150°	2846.7	55.7
90°-180°	3269.0	64.0
0°-180°	5106.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	734	734	734	734	734	
5°	738	730	733	730	729	70
15°	711	703	706	704	702	201
25°	659	650	654	647	647	303
35°	580	573	575	568	567	362
45°	470	463	461	453	452	360
55°	308	302	301	296	294	276
65°	165	164	166	164	164	167
75°	89	89	89	90	90	94
85°	23	24	25	25	25	26
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°	734.5	734.5	734.5	734.5	734.5
2.5°	739.1	732.7	734.5	733.0	729.5
5°	738.4	730.3	732.7	730.1	728.9
7.5°	732.7	724.8	727.2	724.6	723.9
10°	727.6	720.2	722.5	720.0	718.8
12.5°	722.0	714.2	717.0	713.9	712.7
15°	710.6	703.2	706.1	703.5	702.3
17.5°	697.9	690.0	693.0	690.1	688.4
20°	687.7	680.4	683.3	678.9	678.2
22.5°	676.6	669.2	672.1	666.3	666.1
25°	658.7	650.5	654.3	647.3	646.7
27.5°	637.3	629.9	632.8	625.7	625.0
30°	622.5	615.2	618.2	610.5	609.3
32.5°	605.9	599.0	601.5	593.8	593.1
35°	580.3	573.4	575.1	567.6	566.9
37.5°	551.0	544.8	545.8	537.3	536.9
40°	530.2	524.1	524.5	515.6	515.1
42.5°	507.5	501.3	500.7	491.9	491.2
45°	469.5	463.3	461.3	452.9	451.8
47.5°	426.2	420.0	416.2	409.4	408.6
50°	394.8	388.6	385.3	379.6	377.7
52.5°	360.9	354.7	352.0	346.7	344.9
55°	307.5	302.5	300.6	295.5	294.3
57.5°	256.7	253.5	252.8	247.9	247.4
60°	225.9	224.0	224.0	219.6	219.6
62.5°	199.6	198.2	199.1	196.2	195.8
65°	165.1	164.0	165.8	164.4	164.4
67.5°	138.0	138.0	139.1	138.5	138.5
70°	122.7	122.7	123.4	123.4	123.4
72.5°	109.0	108.6	110.3	110.2	109.7
75°	89.3	89.3	89.3	89.8	89.8
77.5°	69.5	69.6	70.2	70.1	69.5
80°	56.3	57.0	57.0	56.3	56.3
82.5°	43.2	43.7	43.7	43.6	43.2
85°	22.8	24.0	25.3	25.3	25.3
87.5°	6.6	8.5	10.2	10.2	9.6
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)