

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: P844869

Luminaire Tested: **SQ4P-BB-125U-050D-B40-1D-UNV**

Issue Date: 8/14/2023



**Test Information**

Test Method: LM-79-08  
Report Number: P844869  
REPORT IS A COMBINATION OF REPORTS P700103 AND P700247  
Test Lab: INNOVATION CENTER  
Issue Date: 8/14/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: SQ4P-BB-125U-050D-B40-1D-UNV  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, 1250 LUMENS PER FOOT  
UPLIGHT, 500 LUMENS PER FOOT DOWNLIGHT  
  
Light Source: -  
Ballast/Driver: -

**Summary**

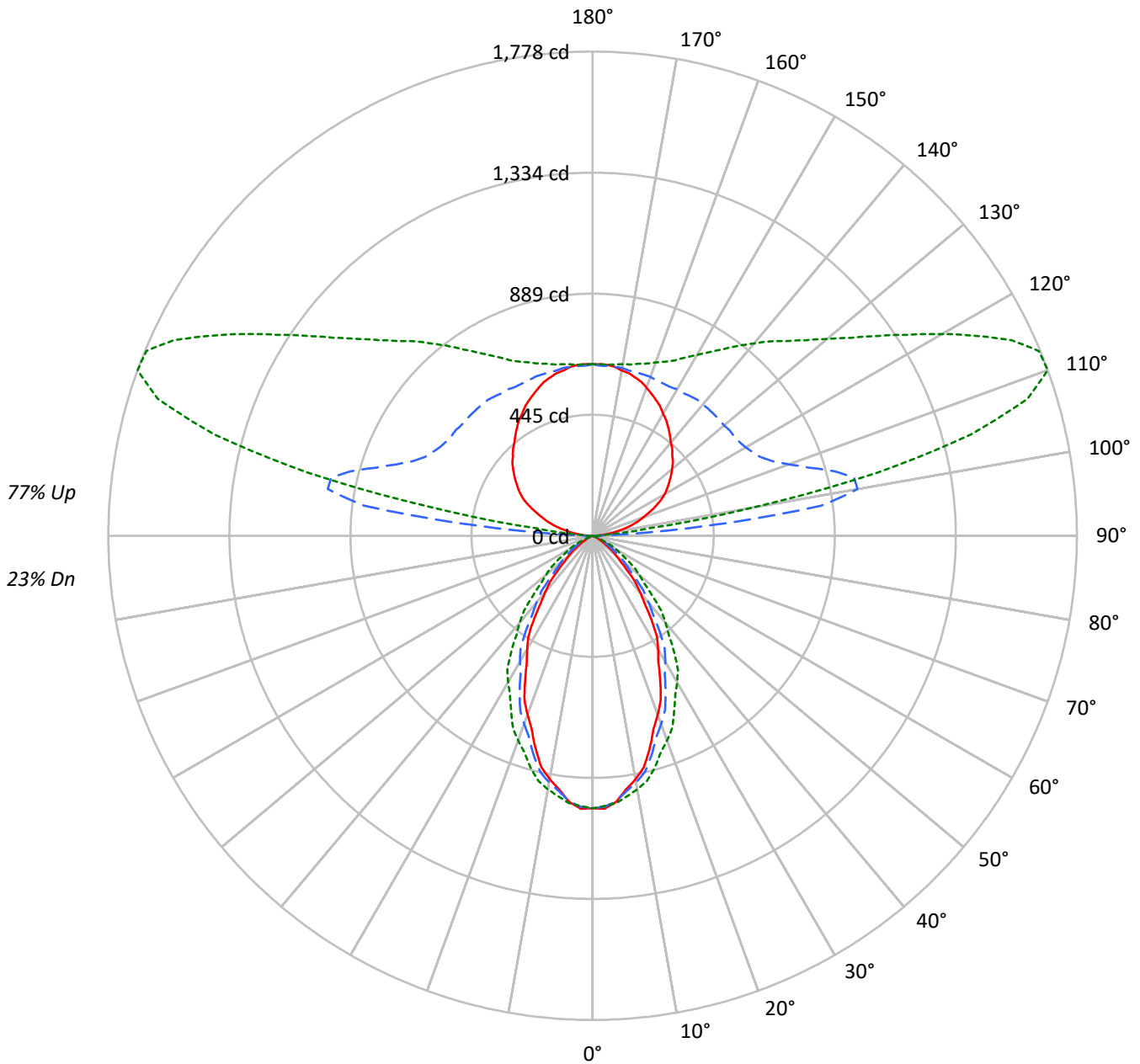
Lumens per Lamp: N/A  
Luminaire Lumens: 5285.7 lumens  
Efficiency: N/A  
Efficacy: 104.0 lumens/watt  
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97  
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')  
CIE Type: Semi-Indirect

Input Watts (W): 50.8  
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									
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	101	101	101	101	89	89	89	89	68	68	68	49	49	49	31	31	31	23																			
1	92	89	85	82	82	79	76	74	61	59	57	44	43	42	29	28	28	21																			
2	85	78	73	68	75	70	65	62	54	51	49	40	38	36	26	25	25	19																			
3	78	69	63	58	69	62	57	52	48	45	42	36	34	32	24	23	22	17																			
4	72	62	55	50	64	56	50	45	44	40	36	32	30	28	22	21	20	15																			
5	66	55	48	43	59	50	44	39	39	35	32	29	27	25	20	19	18	14																			
6	61	50	43	37	54	45	39	34	36	31	28	27	24	22	19	17	16	13																			
7	56	45	38	33	50	41	35	30	32	28	25	25	22	20	17	16	14	12																			
8	52	41	34	29	47	37	31	27	30	25	22	23	20	18	16	14	13	11																			
9	49	38	31	26	44	34	28	24	27	23	20	21	18	16	15	13	12	10																			
10	46	35	28	23	41	31	26	22	25	21	18	19	17	15	14	12	11	9																			

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

	0°	45°	90°
0°	9234	9234	9234
5°	9085	9063	9130
10°	8500	8614	8854
15°	7728	7974	8418
20°	6860	7216	7849
25°	5974	6447	7212
30°	5118	5679	6607
35°	4243	4821	5878
40°	3260	3855	5009
45°	2356	2920	4030
50°	1605	2175	3198
55°	1044	1573	2485
60°	600	1109	1797
65°	159	677	910
70°	81	210	262
75°	36	18	0
80°	27	0	0
85°	0	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	91.3	1.7
10°-20°	233.6	4.4
20°-30°	292.4	5.5
30°-40°	270.1	5.1
40°-50°	181.5	3.4
50°-60°	93.8	1.8
60°-70°	29.4	0.6
70°-80°	1.9	0.0
80°-90°	1.6	0.0
90°-100°	250.8	4.7
100°-110°	872.7	16.5
110°-120°	845.4	16.0
120°-130°	663.2	12.5
130°-140°	524.9	9.9
140°-150°	405.1	7.7
150°-160°	290.4	5.5
160°-170°	177.6	3.4
170°-180°	60.1	1.1
0°-30°	617.3	11.7
0°-40°	887.4	16.8
0°-60°	1162.7	22.0
0°-90°	1195.5	22.6
90°-120°	1969.0	37.3
90°-150°	3562.1	67.4
90°-180°	4090.0	77.4
0°-180°	5285.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1001	1001	1001	1001	1001	
5°	981	971	979	982	986	91
15°	809	806	835	863	881	225
25°	587	592	633	677	708	269
35°	377	386	428	478	522	233
45°	181	192	224	267	309	142
55°	65	76	98	126	154	61
65°	7	14	31	37	42	12
75°	1	1	0	0	0	1
85°	0	0	0	0	0	0
90°	9	14	14	9	5	6
95°	42	146	423	108	66	45
105°	146	207	917	1547	1439	153
115°	254	306	682	1439	1698	251
125°	343	423	635	1072	1279	307
135°	414	466	630	894	1011	321
145°	484	517	626	771	837	303
155°	550	569	616	687	710	254
165°	602	607	621	649	654	170
175°	630	630	626	635	630	60
180°	630	630	630	630	630	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1000.8	1000.8	1000.8	1000.8	1000.8
2.5°	1003.2	993.7	996.1	996.1	993.5
5°	981.0	971.0	978.6	982.0	985.8
7.5°	939.6	931.8	946.3	956.9	964.9
10°	907.3	900.7	919.5	934.2	945.1
12.5°	870.1	865.0	887.7	908.0	921.9
15°	809.1	806.3	834.8	862.8	881.3
17.5°	743.7	743.6	776.0	810.9	833.1
20°	698.7	700.1	735.0	773.4	799.4
22.5°	653.7	657.0	694.3	734.4	764.2
25°	586.8	591.5	633.3	676.7	708.4
27.5°	522.5	529.5	573.4	618.4	657.0
30°	480.4	488.4	533.1	580.5	620.2
32.5°	438.8	448.5	492.0	542.2	582.6
35°	376.7	386.2	428.0	478.4	521.9
37.5°	312.5	321.7	362.6	412.2	459.3
40°	270.7	281.0	320.1	368.1	415.9
42.5°	232.8	243.1	279.8	327.0	372.1
45°	180.6	191.5	223.8	267.3	308.9
47.5°	137.5	149.2	177.4	217.0	254.9
50°	111.8	123.7	151.5	186.3	222.8
52.5°	91.3	102.8	127.9	160.6	194.0
55°	64.9	75.8	97.8	125.6	154.5
57.5°	44.9	54.3	74.0	97.1	119.8
60°	32.5	41.5	60.1	78.8	97.4
62.5°	21.6	29.8	48.0	62.5	74.9
65°	7.3	14.0	31.0	37.4	41.7
67.5°	3.7	4.4	16.2	17.2	18.6
70°	3.0	3.0	7.8	8.2	9.7
72.5°	2.0	2.0	3.1	4.0	4.3
75°	1.0	1.0	0.5	0.0	0.0
77.5°	0.5	0.5	0.5	0.0	0.0
80°	0.5	0.5	0.0	0.0	0.0
82.5°	0.1	0.1	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°	9.4	14.1	14.1	9.4	4.7
92.5°	23.5	70.5	65.8	28.2	23.5
95°	42.3	145.8	423.3	108.1	65.8
97.5°	65.8	164.6	846.6	385.7	207.0
100°	89.3	174.0	987.7	926.5	597.3
102.5°	117.5	188.1	983.0	1302.8	1072.4
105°	145.8	207.0	917.1	1547.4	1439.3



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	225.8	277.5	714.9	1556.8	1773.2
115°	254.0	305.7	682.0	1439.3	1697.9
117.5°	282.2	338.7	663.1	1331.1	1589.7
120°	305.7	366.9	649.1	1227.6	1481.6
122.5°	324.5	395.1	639.7	1142.9	1373.4
125°	343.3	423.3	634.9	1072.4	1279.4
127.5°	362.1	442.1	634.9	1020.6	1194.7
130°	380.9	451.5	630.3	968.9	1124.1
132.5°	399.8	456.2	630.3	931.3	1063.0
135°	413.9	465.6	630.3	893.7	1011.2
137.5°	432.7	475.0	630.3	860.7	968.9
140°	446.8	489.2	630.3	827.8	921.9
142.5°	465.6	503.2	630.3	794.8	879.5
145°	484.4	517.4	625.5	771.4	837.2
147.5°	503.2	531.4	620.9	747.8	799.6
150°	517.4	545.6	620.9	724.3	766.6
152.5°	536.2	559.7	616.1	700.8	738.4
155°	550.3	569.1	616.1	686.7	710.2
157.5°	564.4	583.2	616.1	672.6	691.4
160°	578.5	592.6	620.9	663.1	677.3
162.5°	592.6	602.1	620.9	653.7	663.1
165°	602.1	606.7	620.9	649.1	653.7
167.5°	611.5	616.1	620.9	644.3	644.3
170°	616.1	620.9	625.5	639.7	639.7
172.5°	625.5	625.5	625.5	634.9	634.9
175°	630.3	630.3	625.5	634.9	630.3
177.5°	630.3	630.3	625.5	634.9	630.3
180°	630.3	630.3	630.3	630.3	630.3



Report Generated By 670246072 / DESKTOP-50001EG







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







107.5°	174.0	230.4	832.5	1655.5	1674.4
110°	197.5	254.0	766.6	1641.5	1777.8



(END OF REPORT)