

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: P844830

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

Issue Date: 8/14/2023

**Test Information**

Test Method: LM-79-08  
Report Number: P844830  
REPORT IS A COMBINATION OF REPORTS P700190 AND P700244  
Test Lab: INNOVATION CENTER  
Issue Date: 8/14/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: SQ4P-BB-050U-125D-B40-1D-UNV  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, 500 LUMENS PER FOOT  
UPLIGHT, 1250 LUMENS PER FOOT DOWNLIGHT  
  
Light Source: -  
Ballast/Driver: -

**Summary**

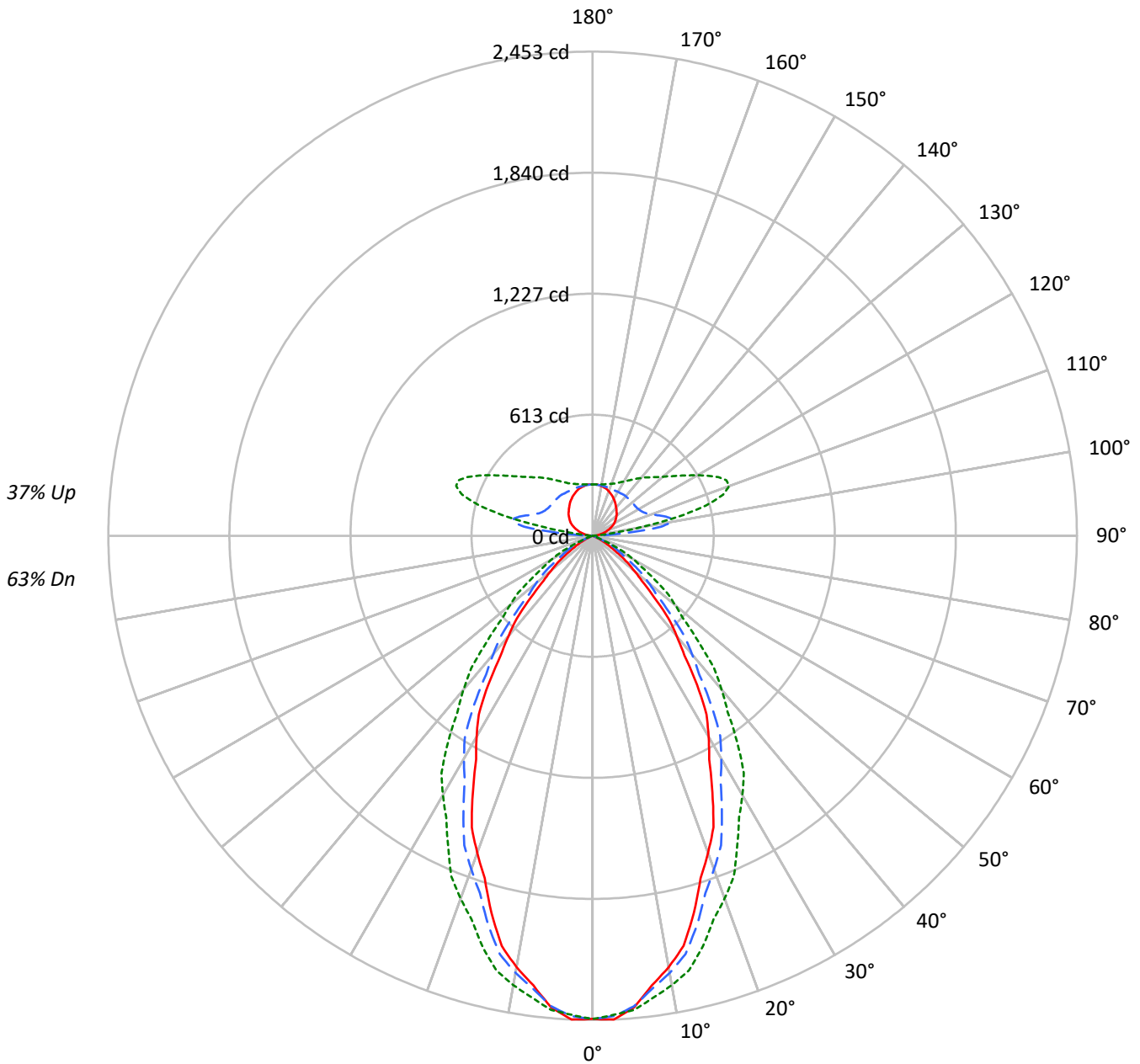
Lumens per Lamp: N/A  
Luminaire Lumens: 4614.0 lumens  
Efficiency: N/A  
Efficacy: 78.5 lumens/watt  
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97  
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')  
CIE Type: Semi-Direct

Input Watts (W): 58.8  
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

TEST NUMBER: P844830

CATALOG NUMBER: SQ4P-BB-050U-125D-B40-1D-UNV

### 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	103	103	103	103	91	91	91	79	79	79	68	68	68	63																			
1	103	99	96	94	97	94	91	89	83	81	79	73	72	70	64	63	62	58																			
2	96	90	85	80	90	85	80	77	75	72	69	67	65	62	59	57	56	52																			
3	89	81	75	70	84	77	71	67	69	65	61	61	58	56	55	52	50	47																			
4	83	73	67	61	78	70	64	59	63	58	54	56	53	50	50	48	46	43																			
5	77	67	60	55	72	64	57	53	58	53	49	52	48	45	47	44	41	39																			
6	72	61	54	49	68	58	52	47	53	48	44	48	44	41	43	40	38	35																			
7	67	56	49	44	63	54	47	43	49	44	40	45	40	37	40	37	35	32																			
8	63	52	45	40	59	50	43	39	45	40	36	41	37	34	38	34	32	30																			
9	59	48	41	36	56	46	40	35	42	37	33	39	34	31	35	32	29	28																			
10	56	44	38	33	53	43	37	33	39	34	31	36	32	29	33	30	27	26																			

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

	0°	45°	90°
0°	22583	22583	22583
5°	22219	22164	22328
10°	20789	21067	21655
15°	18900	19500	20586
20°	16778	17648	19194
25°	14609	15767	17636
30°	12516	13889	16160
35°	10376	11791	14376
40°	7972	9428	12250
45°	5765	7138	9858
50°	3926	5318	7820
55°	2553	3848	6075
60°	1465	2711	4394
65°	386	1657	2222
70°	197	513	634
75°	86	39	0
80°	58	0	0
85°	0	0	0



TEST NUMBER: P844830

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	223.4	4.8
10°-20°	571.2	12.4
20°-30°	715.1	15.5
30°-40°	660.5	14.3
40°-50°	443.8	9.6
50°-60°	229.3	5.0
60°-70°	71.8	1.6
70°-80°	4.5	0.1
80°-90°	0.7	0.0
90°-100°	103.8	2.3
100°-110°	361.4	7.8
110°-120°	350.0	7.6
120°-130°	274.6	6.0
130°-140°	217.3	4.7
140°-150°	167.7	3.6
150°-160°	120.2	2.6
160°-170°	73.5	1.6
170°-180°	24.9	0.5
0°-30°	1509.7	32.7
0°-40°	2170.3	47.0
0°-60°	2843.4	61.6
0°-90°	2920.4	63.3
90°-120°	815.2	17.7
90°-150°	1474.9	32.0
90°-180°	1694.0	36.7
0°-180°	4614.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2448	2448	2448	2448	2448	
5°	2399	2375	2393	2402	2411	222
15°	1979	1972	2042	2110	2155	551
25°	1435	1447	1549	1655	1732	658
35°	921	944	1047	1170	1276	571
45°	442	468	547	654	756	347
55°	159	185	239	307	378	148
65°	18	34	76	91	102	30
75°	2	2	1	0	0	3
85°	0	0	0	0	0	0
90°	4	6	6	4	2	2
95°	18	60	175	45	27	19
105°	60	86	380	641	596	63
115°	105	127	282	596	703	104
125°	142	175	263	444	530	127
135°	171	193	261	370	419	133
145°	201	214	259	319	347	125
155°	228	236	255	284	294	105
165°	249	251	257	269	271	70
175°	261	261	259	263	261	25
180°	261	261	261	261	261	



TEST NUMBER: P844830

CATALOG NUMBER: SQ4P-BB-050U-125D-B40-1D-UNV

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2447.7	2447.7	2447.7	2447.7	2447.7
2.5°	2453.3	2430.2	2436.1	2436.1	2429.7
5°	2399.1	2374.8	2393.2	2401.5	2410.9
7.5°	2297.8	2278.8	2314.1	2340.4	2359.8
10°	2219.0	2202.9	2248.7	2284.7	2311.5
12.5°	2128.1	2115.5	2171.0	2220.6	2254.6
15°	1978.7	1971.8	2041.5	2109.8	2155.2
17.5°	1818.7	1818.4	1897.8	1983.1	2037.5
20°	1708.8	1712.3	1797.5	1891.4	1954.9
22.5°	1598.9	1606.9	1698.1	1796.0	1868.8
25°	1435.1	1446.6	1548.8	1655.0	1732.4
27.5°	1278.0	1294.9	1402.4	1512.3	1606.9
30°	1174.8	1194.4	1303.7	1419.6	1516.9
32.5°	1073.1	1096.8	1203.2	1326.0	1424.9
35°	921.2	944.4	1046.9	1169.9	1276.4
37.5°	764.3	786.9	886.9	1008.3	1123.3
40°	661.9	687.4	782.8	900.3	1017.1
42.5°	569.1	594.6	684.2	799.7	910.1
45°	441.8	468.3	547.1	653.6	755.5
47.5°	336.2	364.9	434.0	530.6	623.3
50°	273.5	302.4	370.5	455.5	544.8
52.5°	223.3	251.5	312.8	392.8	474.6
55°	158.7	185.3	239.2	307.2	377.7
57.5°	109.6	132.7	180.9	237.5	293.0
60°	79.4	101.4	146.9	192.7	238.1
62.5°	52.8	72.9	117.5	152.8	183.2
65°	17.7	34.0	75.9	91.4	101.8
67.5°	9.1	10.8	39.6	42.1	45.5
70°	7.3	7.3	19.0	20.1	23.5
72.5°	5.1	5.1	7.5	9.7	10.5
75°	2.4	2.4	1.1	0.0	0.0
77.5°	1.1	1.1	1.1	0.0	0.0
80°	1.1	1.1	0.0	0.0	0.0
82.5°	0.3	0.3	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°	3.9	5.8	5.8	3.9	1.9
92.5°	9.7	29.2	27.2	11.7	9.7
95°	17.5	60.4	175.3	44.8	27.2
97.5°	27.2	68.1	350.5	159.7	85.7
100°	37.0	72.1	408.9	383.7	247.3
102.5°	48.6	77.9	407.0	539.4	444.0
105°	60.4	85.7	379.8	640.6	595.9



TEST NUMBER: P844830

CATALOG NUMBER: SQ4P-BB-050U-125D-B40-1D-UNV

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	93.5	114.9	296.0	644.6	734.2
115°	105.1	126.6	282.4	595.9	703.0
117.5°	116.9	140.2	274.5	551.1	658.2
120°	126.6	151.9	268.7	508.3	613.4
122.5°	134.4	163.6	264.8	473.2	568.6
125°	142.2	175.3	262.9	444.0	529.7
127.5°	149.9	183.1	262.9	422.6	494.6
130°	157.8	186.9	261.0	401.2	465.4
132.5°	165.5	188.9	261.0	385.6	440.1
135°	171.3	192.7	261.0	370.0	418.7
137.5°	179.2	196.7	261.0	356.3	401.2
140°	185.0	202.5	261.0	342.8	381.7
142.5°	192.7	208.3	261.0	329.1	364.2
145°	200.6	214.3	259.0	319.4	346.6
147.5°	208.3	220.1	257.1	309.6	331.0
150°	214.3	225.9	257.1	299.9	317.5
152.5°	222.0	231.7	255.2	290.1	305.7
155°	227.8	235.7	255.2	284.3	294.0
157.5°	233.6	241.5	255.2	278.5	286.3
160°	239.6	245.4	257.1	274.5	280.4
162.5°	245.4	249.2	257.1	270.7	274.5
165°	249.2	251.2	257.1	268.7	270.7
167.5°	253.1	255.2	257.1	266.8	266.8
170°	255.2	257.1	259.0	264.8	264.8
172.5°	259.0	259.0	259.0	262.9	262.9
175°	261.0	261.0	259.0	262.9	261.0
177.5°	261.0	261.0	259.0	262.9	261.0
180°	261.0	261.0	261.0	261.0	261.0



Report Generated By 670246072 / DESKTOP-50001EG







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







107.5°	72.1	95.5	344.7	685.5	693.3
110°	81.8	105.1	317.5	679.6	736.1



(END OF REPORT)