

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: P844818

Luminaire Tested: **SQ4P-BB-025U-125D-B40-1D-UNV**

Issue Date: 8/14/2023

**Test Information**

Test Method: LM-79-08  
Report Number: P844818  
REPORT IS A COMBINATION OF REPORTS P700162 AND P700243  
Test Lab: INNOVATION CENTER  
Issue Date: 8/14/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: SQ4P-BB-025U-125D-B40-1D-UNV  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, 250 LUMENS PER FOOT  
UPLIGHT, 1250 LUMENS PER FOOT DOWNLIGHT  
  
Light Source: -  
Ballast/Driver: -

**Summary**

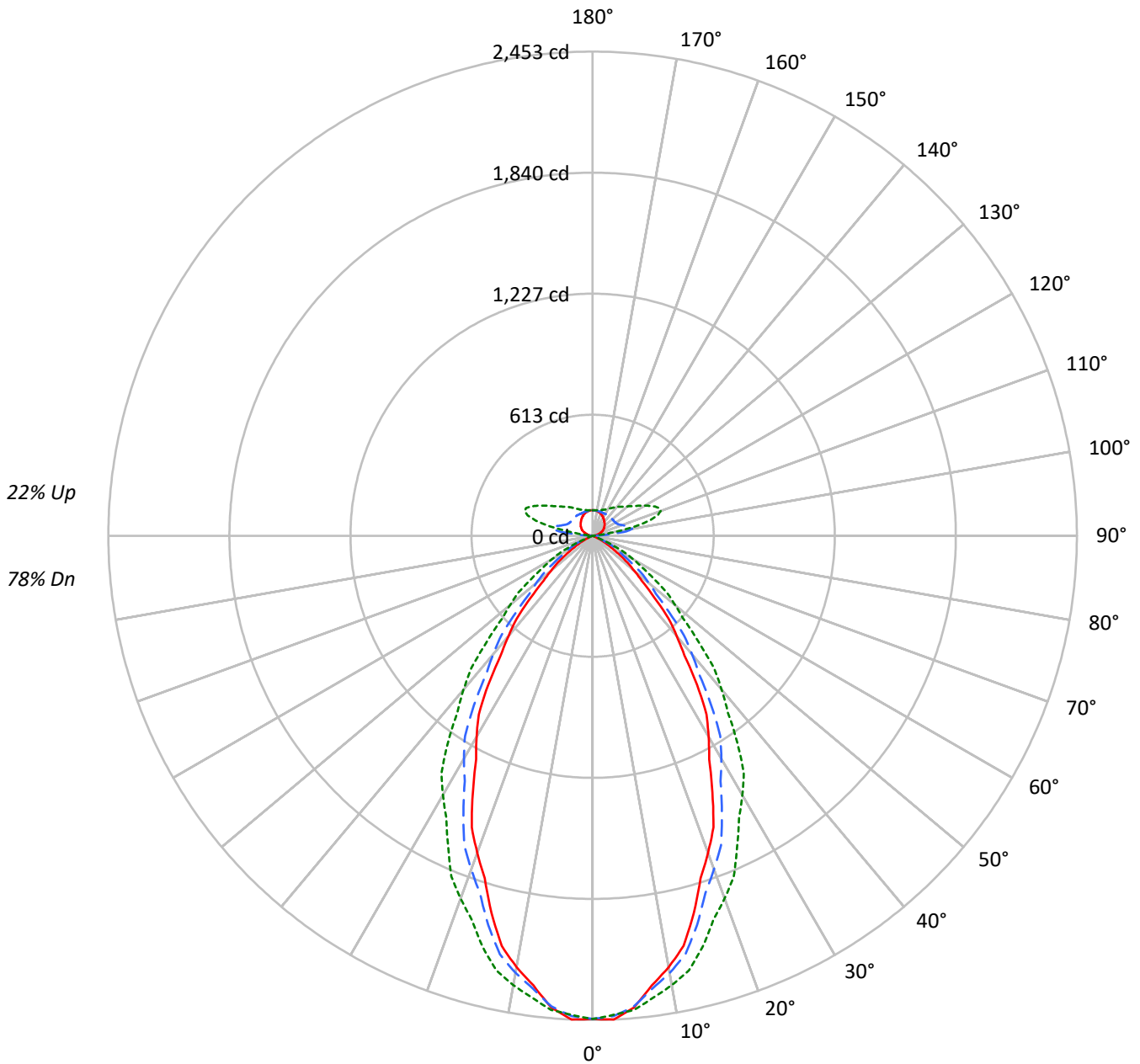
Lumens per Lamp: N/A  
Luminaire Lumens: 3762.9 lumens  
Efficiency: N/A  
Efficacy: 71.3 lumens/watt  
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97  
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')  
CIE Type: Semi-Direct

Input Watts (W): 52.8  
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	114	114	114	114	108	108	108	108	99	99	99	90	90	90	81	81	81	78																			
1	107	103	100	98	102	99	96	94	91	89	87	83	82	80	76	75	74	71																			
2	100	94	89	84	95	90	86	82	83	80	77	77	74	72	71	69	67	64																			
3	93	85	79	74	89	82	76	72	76	72	68	70	67	64	65	63	60	58																			
4	87	77	71	66	83	75	69	64	70	65	61	65	61	58	60	57	55	52																			
5	81	71	64	59	77	68	62	57	64	59	55	60	56	52	56	53	50	48																			
6	76	65	58	53	72	63	56	52	59	54	50	55	51	48	52	48	45	43																			
7	71	60	53	48	68	58	52	47	55	49	45	52	47	43	49	45	42	40																			
8	67	55	48	44	64	54	47	43	51	45	41	48	43	40	45	41	38	37																			
9	63	51	45	40	60	50	44	39	47	42	38	45	40	37	42	39	36	34																			
10	59	48	41	37	57	47	41	36	44	39	35	42	37	34	40	36	33	31																			

**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



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	223.4	5.9
10°-20°	571.2	15.2
20°-30°	715.1	19.0
30°-40°	660.5	17.6
40°-50°	443.8	11.8
50°-60°	229.3	6.1
60°-70°	71.8	1.9
70°-80°	4.5	0.1
80°-90°	0.4	0.0
90°-100°	51.7	1.4
100°-110°	179.8	4.8
110°-120°	174.2	4.6
120°-130°	136.6	3.6
130°-140°	108.2	2.9
140°-150°	83.5	2.2
150°-160°	59.8	1.6
160°-170°	36.6	1.0
170°-180°	12.4	0.3
0°-30°	1509.7	40.1
0°-40°	2170.3	57.7
0°-60°	2843.4	75.6
0°-90°	2920.1	77.6
90°-120°	405.7	10.8
90°-150°	734.0	19.5
90°-180°	843.0	22.4
0°-180°	3762.9	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°	2	3	3	2	1	1
95°	9	30	87	22	14	9
105°	30	43	189	319	297	32
115°	52	63	140	297	350	52
125°	71	87	131	221	264	63
135°	85	96	130	184	208	66
145°	100	107	129	159	172	62
155°	113	117	127	142	146	52
165°	124	125	128	134	135	35
175°	130	130	129	131	130	12
180°	130	130	130	130	130	



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**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°	1.9	2.9	2.9	1.9	1.0
92.5°	4.8	14.5	13.6	5.8	4.8
95°	8.7	30.0	87.2	22.3	13.6
97.5°	13.6	33.9	174.4	79.5	42.6
100°	18.4	35.9	203.5	190.9	123.1
102.5°	24.2	38.8	202.5	268.4	220.9
105°	30.0	42.6	189.0	318.9	296.6



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	46.5	57.2	147.3	320.9	365.4
115°	52.3	63.0	140.5	296.6	349.9
117.5°	58.1	69.8	136.6	274.2	327.6
120°	63.0	75.6	133.7	252.9	305.4
122.5°	66.9	81.4	131.8	235.5	283.1
125°	70.7	87.2	130.8	220.9	263.6
127.5°	74.6	91.1	130.8	210.3	246.1
130°	78.5	93.0	129.9	199.6	231.6
132.5°	82.4	94.0	129.9	191.9	219.0
135°	85.3	95.9	129.9	184.1	208.3
137.5°	89.2	97.9	129.9	177.3	199.6
140°	92.1	100.8	129.9	170.6	189.9
142.5°	95.9	103.7	129.9	163.8	181.2
145°	99.8	106.6	128.9	158.9	172.5
147.5°	103.7	109.5	127.9	154.1	164.7
150°	106.6	112.4	127.9	149.2	158.0
152.5°	110.5	115.3	126.9	144.4	152.1
155°	113.4	117.3	126.9	141.5	146.3
157.5°	116.3	120.2	126.9	138.6	142.5
160°	119.2	122.1	127.9	136.6	139.5
162.5°	122.1	124.0	127.9	134.7	136.6
165°	124.0	125.0	127.9	133.7	134.7
167.5°	126.0	126.9	127.9	132.8	132.8
170°	126.9	127.9	128.9	131.8	131.8
172.5°	128.9	128.9	128.9	130.8	130.8
175°	129.9	129.9	128.9	130.8	129.9
177.5°	129.9	129.9	128.9	130.8	129.9
180°	129.9	129.9	129.9	129.9	129.9



Report Generated By 670246072 / DESKTOP-50001EG







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







107.5°	35.9	47.5	171.5	341.2	345.1
110°	40.7	52.3	158.0	338.3	366.4



(END OF REPORT)