

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: P844831

Luminaire Tested: **SQ4P-BB-050U-125D-B50-1D-UNV**

Issue Date: 8/14/2023

**Test Information**

Test Method: LM-79-08  
Report Number: P844831  
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-B50-1D-UNV  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, 500 LUMENS PER FOOT UPLIGHT, 1250 LUMENS PER FOOT DOWNLIGHT  
  
Light Source: -  
Ballast/Driver: -

**Summary**

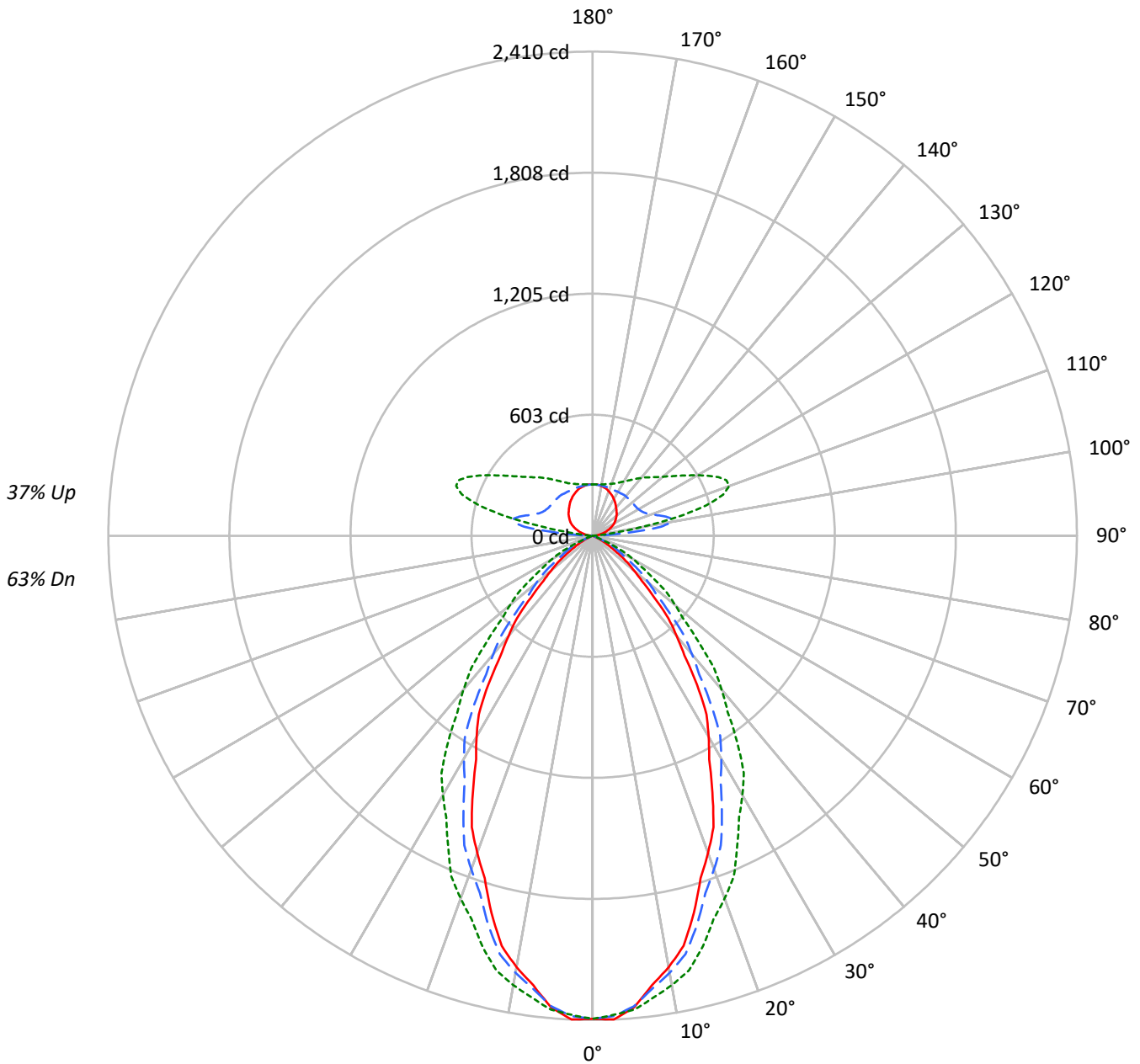
Lumens per Lamp: N/A  
Luminaire Lumens: 4532.8 lumens  
Efficiency: N/A  
Efficacy: 77.1 lumens/watt  
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97  
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')  
CIE Type: Semi-Direct

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

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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	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°	22185	22185	22185
5°	21828	21775	21936
10°	20422	20697	21275
15°	18567	19157	20224
20°	16483	17338	18856
25°	14353	15489	17325
30°	12295	13645	15876
35°	10193	11584	14123
40°	7831	9262	12034
45°	5663	7013	9684
50°	3857	5225	7682
55°	2508	3780	5969
60°	1439	2663	4316
65°	380	1626	2185
70°	192	504	623
75°	86	36	0
80°	53	0	0
85°	0	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	219.4	4.8
10°-20°	561.2	12.4
20°-30°	702.6	15.5
30°-40°	648.9	14.3
40°-50°	436.0	9.6
50°-60°	225.2	5.0
60°-70°	70.5	1.6
70°-80°	4.4	0.1
80°-90°	0.7	0.0
90°-100°	102.0	2.3
100°-110°	355.0	7.8
110°-120°	343.9	7.6
120°-130°	269.8	6.0
130°-140°	213.5	4.7
140°-150°	164.8	3.6
150°-160°	118.1	2.6
160°-170°	72.3	1.6
170°-180°	24.4	0.5
0°-30°	1483.2	32.7
0°-40°	2132.1	47.0
0°-60°	2793.4	61.6
0°-90°	2869.0	63.3
90°-120°	800.9	17.7
90°-150°	1449.0	32.0
90°-180°	1664.0	36.7
0°-180°	4532.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2405	2405	2405	2405	2405	
5°	2357	2333	2351	2359	2368	219
15°	1944	1937	2006	2073	2117	541
25°	1410	1421	1522	1626	1702	646
35°	905	928	1028	1149	1254	561
45°	434	460	538	642	742	341
55°	156	182	235	302	371	145
65°	17	33	74	90	100	29
75°	2	2	1	0	0	3
85°	0	0	0	0	0	0
90°	4	6	6	4	2	2
95°	17	59	172	44	27	18
105°	59	84	373	629	585	62
115°	103	124	277	585	691	102
125°	140	172	258	436	520	125
135°	168	189	256	364	411	130
145°	197	210	254	314	340	123
155°	224	232	251	279	289	103
165°	245	247	253	264	266	69
175°	256	256	254	258	256	24
180°	256	256	256	256	256	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2404.6	2404.6	2404.6	2404.6	2404.6
2.5°	2410.1	2387.5	2393.3	2393.3	2387.0
5°	2356.9	2333.0	2351.1	2359.3	2368.5
7.5°	2257.4	2238.7	2273.4	2299.2	2318.3
10°	2179.9	2164.1	2209.2	2244.5	2270.9
12.5°	2090.6	2078.3	2132.8	2181.6	2215.0
15°	1943.9	1937.2	2005.6	2072.7	2117.3
17.5°	1786.8	1786.5	1864.4	1948.2	2001.6
20°	1678.8	1682.2	1765.9	1858.2	1920.5
22.5°	1570.7	1578.6	1668.2	1764.4	1836.0
25°	1409.9	1421.2	1521.5	1625.9	1701.9
27.5°	1255.5	1272.1	1377.8	1485.7	1578.6
30°	1154.1	1173.4	1280.8	1394.6	1490.2
32.5°	1054.3	1077.5	1182.0	1302.7	1399.9
35°	905.0	927.8	1028.5	1149.4	1253.9
37.5°	750.9	773.0	871.3	990.6	1103.6
40°	650.2	675.3	769.0	884.4	999.2
42.5°	559.1	584.2	672.1	785.6	894.1
45°	434.0	460.1	537.5	642.1	742.2
47.5°	330.3	358.4	426.4	521.2	612.3
50°	268.7	297.1	364.0	447.5	535.2
52.5°	219.3	247.1	307.3	385.9	466.2
55°	155.9	182.0	235.0	301.8	371.1
57.5°	107.7	130.3	177.7	233.3	287.9
60°	78.0	99.6	144.3	189.4	233.9
62.5°	51.9	71.6	115.4	150.1	179.9
65°	17.4	33.4	74.5	89.8	100.1
67.5°	8.9	10.6	38.9	41.3	44.7
70°	7.1	7.1	18.7	19.7	23.1
72.5°	5.0	5.0	7.3	9.5	10.3
75°	2.4	2.4	1.0	0.0	0.0
77.5°	1.0	1.0	1.0	0.0	0.0
80°	1.0	1.0	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°	3.8	5.7	5.7	3.8	1.9
92.5°	9.5	28.7	26.8	11.5	9.5
95°	17.2	59.3	172.2	44.0	26.8
97.5°	26.8	66.9	344.3	156.9	84.2
100°	36.4	70.8	401.8	376.9	243.0
102.5°	47.8	76.5	399.9	529.9	436.2
105°	59.3	84.2	373.1	629.4	585.4



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	91.9	112.9	290.8	633.3	721.3
115°	103.3	124.3	277.4	585.4	690.6
117.5°	114.8	137.8	269.7	541.4	646.6
120°	124.3	149.2	264.0	499.3	602.6
122.5°	132.0	160.7	260.2	464.9	558.6
125°	139.7	172.2	258.3	436.2	520.4
127.5°	147.3	179.8	258.3	415.2	485.9
130°	155.0	183.6	256.4	394.1	457.3
132.5°	162.6	185.5	256.4	378.8	432.4
135°	168.3	189.4	256.4	363.5	411.4
137.5°	176.0	193.3	256.4	350.1	394.1
140°	181.7	199.0	256.4	336.7	375.0
142.5°	189.4	204.7	256.4	323.3	357.8
145°	197.1	210.5	254.5	313.8	340.5
147.5°	204.7	216.2	252.6	304.2	325.2
150°	210.5	221.9	252.6	294.7	311.9
152.5°	218.1	227.6	250.7	285.0	300.4
155°	223.8	231.5	250.7	279.3	288.8
157.5°	229.5	237.2	250.7	273.6	281.2
160°	235.3	241.1	252.6	269.7	275.5
162.5°	241.1	244.9	252.6	265.9	269.7
165°	244.9	246.8	252.6	264.0	265.9
167.5°	248.7	250.7	252.6	262.1	262.1
170°	250.7	252.6	254.5	260.2	260.2
172.5°	254.5	254.5	254.5	258.3	258.3
175°	256.4	256.4	254.5	258.3	256.4
177.5°	256.4	256.4	254.5	258.3	256.4
180°	256.4	256.4	256.4	256.4	256.4



Report Generated By 670246072 / DESKTOP-50001EG







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







107.5°	70.8	93.8	338.6	673.5	681.1
110°	80.4	103.3	311.9	667.7	723.2



(END OF REPORT)