

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: P844843

Luminaire Tested: **SQ4P-BB-075U-125D-B50-1D-UNV**

Issue Date: 8/14/2023

**Test Information**

Test Method: LM-79-08  
Report Number: P844843  
REPORT IS A COMBINATION OF REPORTS P700218 AND P700245  
Test Lab: INNOVATION CENTER  
Issue Date: 8/14/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: SQ4P-BB-075U-125D-B50-1D-UNV  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, 750 LUMENS PER FOOT UPLIGHT, 1250 LUMENS PER FOOT DOWNLIGHT

Light Source: -  
Ballast/Driver: -

**Summary**

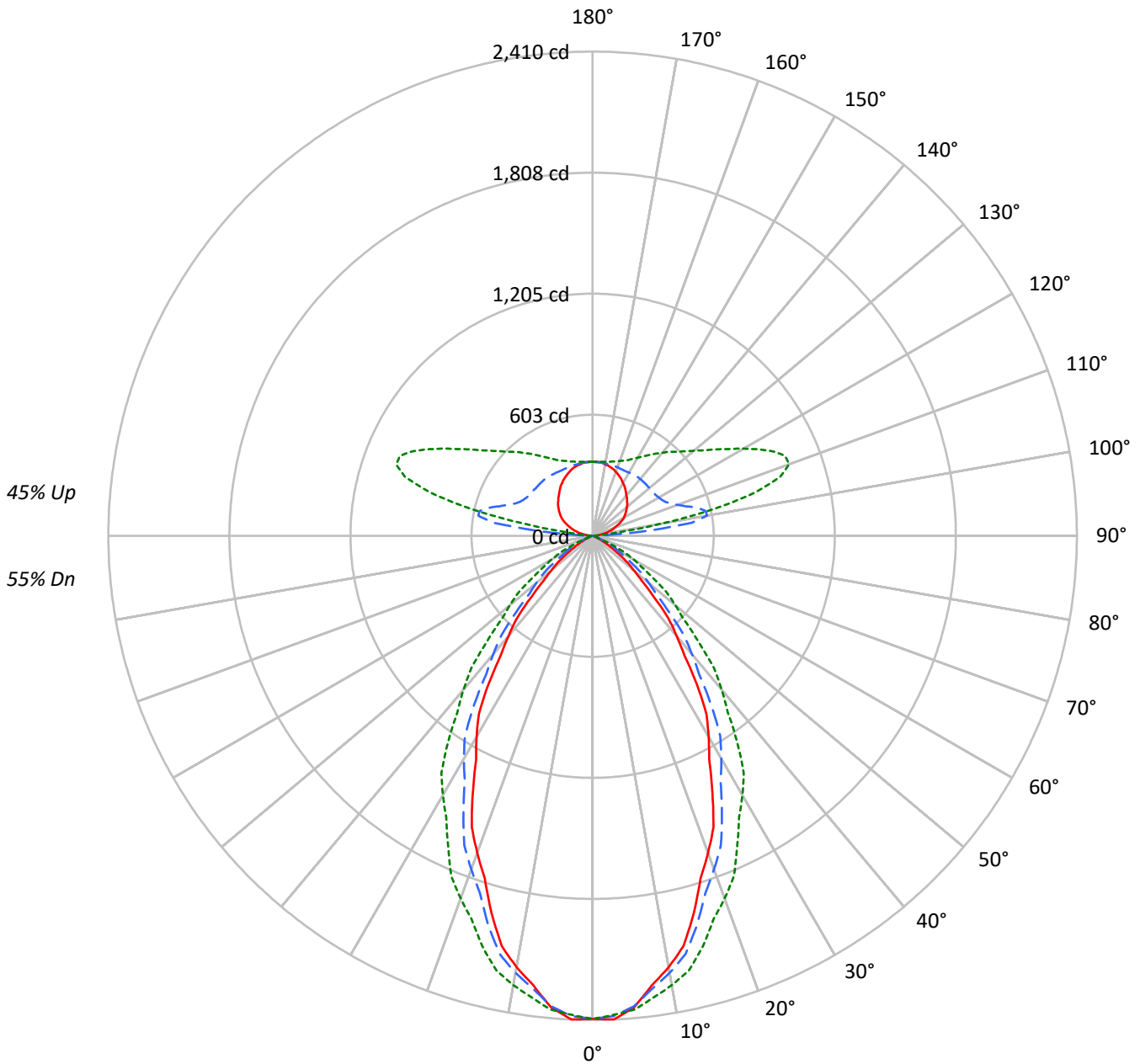
Lumens per Lamp: N/A  
Luminaire Lumens: 5263.0 lumens  
Efficiency: N/A  
Efficacy: 81.2 lumens/watt  
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97  
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')  
CIE Type: General Diffuse

Input Watts (W): 64.8  
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: P844843

CATALOG NUMBER: SQ4P-BB-075U-125D-B50-1D-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	108	108	108	108	100	100	100	100	86	86	86	73	73	73	60	60	60	55																			
1	101	97	94	91	94	91	88	85	78	76	74	67	65	64	56	55	55	50																			
2	93	87	82	78	87	81	77	73	71	68	65	61	59	57	52	50	49	45																			
3	87	78	72	67	80	74	68	64	64	60	57	56	53	51	48	46	44	41																			
4	80	71	64	59	75	67	61	56	59	54	51	51	48	45	44	42	40	37																			
5	75	64	57	52	69	61	54	50	54	49	45	47	43	41	41	38	36	33																			
6	69	59	51	46	65	55	49	44	49	44	41	43	40	37	38	35	33	30																			
7	65	54	47	42	61	51	44	40	45	40	37	40	36	33	35	32	30	28																			
8	61	49	42	38	57	47	41	36	42	37	33	37	33	31	33	30	28	26																			
9	57	46	39	34	53	43	37	33	39	34	31	35	31	28	31	28	26	24																			
10	53	42	36	31	50	40	34	30	36	31	28	33	29	26	29	26	24	22																			

**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	4.2
10°-20°	561.2	10.7
20°-30°	702.6	13.3
30°-40°	648.9	12.3
40°-50°	436.0	8.3
50°-60°	225.2	4.3
60°-70°	70.5	1.3
70°-80°	4.4	0.1
80°-90°	1.0	0.0
90°-100°	146.8	2.8
100°-110°	510.8	9.7
110°-120°	494.8	9.4
120°-130°	388.1	7.4
130°-140°	307.2	5.8
140°-150°	237.1	4.5
150°-160°	169.9	3.2
160°-170°	103.9	2.0
170°-180°	35.2	0.7
0°-30°	1483.2	28.2
0°-40°	2132.1	40.5
0°-60°	2793.4	53.1
0°-90°	2869.3	54.5
90°-120°	1152.3	21.9
90°-150°	2084.7	39.6
90°-180°	2394.0	45.5
0°-180°	5263.0	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°	6	8	8	6	3	3
95°	25	85	248	63	39	26
105°	85	121	537	906	842	90
115°	149	179	399	842	994	147
125°	201	248	372	628	749	180
135°	242	272	369	523	592	188
145°	284	303	366	452	490	177
155°	322	333	360	402	416	148
165°	352	355	363	380	383	99
175°	369	369	366	372	369	35
180°	369	369	369	369	369	



TEST NUMBER: P844843

CATALOG NUMBER: SQ4P-BB-075U-125D-B50-1D-UNV

**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°	5.5	8.3	8.3	5.5	2.8
92.5°	13.8	41.3	38.6	16.5	13.8
95°	24.8	85.3	247.7	63.3	38.6
97.5°	38.6	96.3	495.4	225.7	121.1
100°	52.3	101.9	578.0	542.3	349.6
102.5°	68.8	110.1	575.3	762.5	627.6
105°	85.3	121.1	536.8	905.6	842.3



TEST NUMBER: P844843

CATALOG NUMBER: SQ4P-BB-075U-125D-B50-1D-UNV

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	132.1	162.4	418.4	911.1	1037.7
115°	148.6	178.9	399.1	842.3	993.6
117.5°	165.2	198.2	388.1	778.9	930.3
120°	178.9	214.7	379.9	718.4	867.0
122.5°	189.9	231.2	374.3	668.9	803.7
125°	201.0	247.7	371.6	627.6	748.7
127.5°	211.9	258.8	371.6	597.3	699.2
130°	223.0	264.3	368.8	567.0	657.8
132.5°	233.9	266.9	368.8	545.0	622.1
135°	242.2	272.5	368.8	522.9	591.8
137.5°	253.2	278.0	368.8	503.7	567.0
140°	261.5	286.3	368.8	484.4	539.5
142.5°	272.5	294.6	368.8	465.2	514.7
145°	283.5	302.7	366.1	451.5	489.9
147.5°	294.6	311.0	363.3	437.6	467.9
150°	302.7	319.3	363.3	423.8	448.7
152.5°	313.8	327.5	360.5	410.1	432.1
155°	322.1	333.0	360.5	401.8	415.7
157.5°	330.3	341.3	360.5	393.6	404.6
160°	338.5	346.8	363.3	388.1	396.3
162.5°	346.8	352.3	363.3	382.6	388.1
165°	352.3	355.1	363.3	379.9	382.6
167.5°	357.9	360.5	363.3	377.1	377.1
170°	360.5	363.3	366.1	374.3	374.3
172.5°	366.1	366.1	366.1	371.6	371.6
175°	368.8	368.8	366.1	371.6	368.8
177.5°	368.8	368.8	366.1	371.6	368.8
180°	368.8	368.8	368.8	368.8	368.8



Report Generated By 670246072 / DESKTOP-50001EG







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







107.5°	101.9	134.9	487.2	968.9	979.9
110°	115.6	148.6	448.7	960.6	1040.5



(END OF REPORT)