

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: P844918

Luminaire Tested: **SQ4P-F-075U-050D-B50-1D-UNV**

Issue Date: 8/14/2023

**Test Information**

Test Method: LM-79-08  
Report Number: P844918  
REPORT IS A COMBINATION OF REPORTS P700219 AND P700245  
Test Lab: INNOVATION CENTER  
Issue Date: 8/14/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: SQ4P-F-075U-050D-B50-1D-UNV  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, 750 LUMENS PER FOOT  
UPLIGHT, 500 LUMENS PER FOOT DOWNLIGHT  
  
Light Source: -  
Ballast/Driver: -

**Summary**

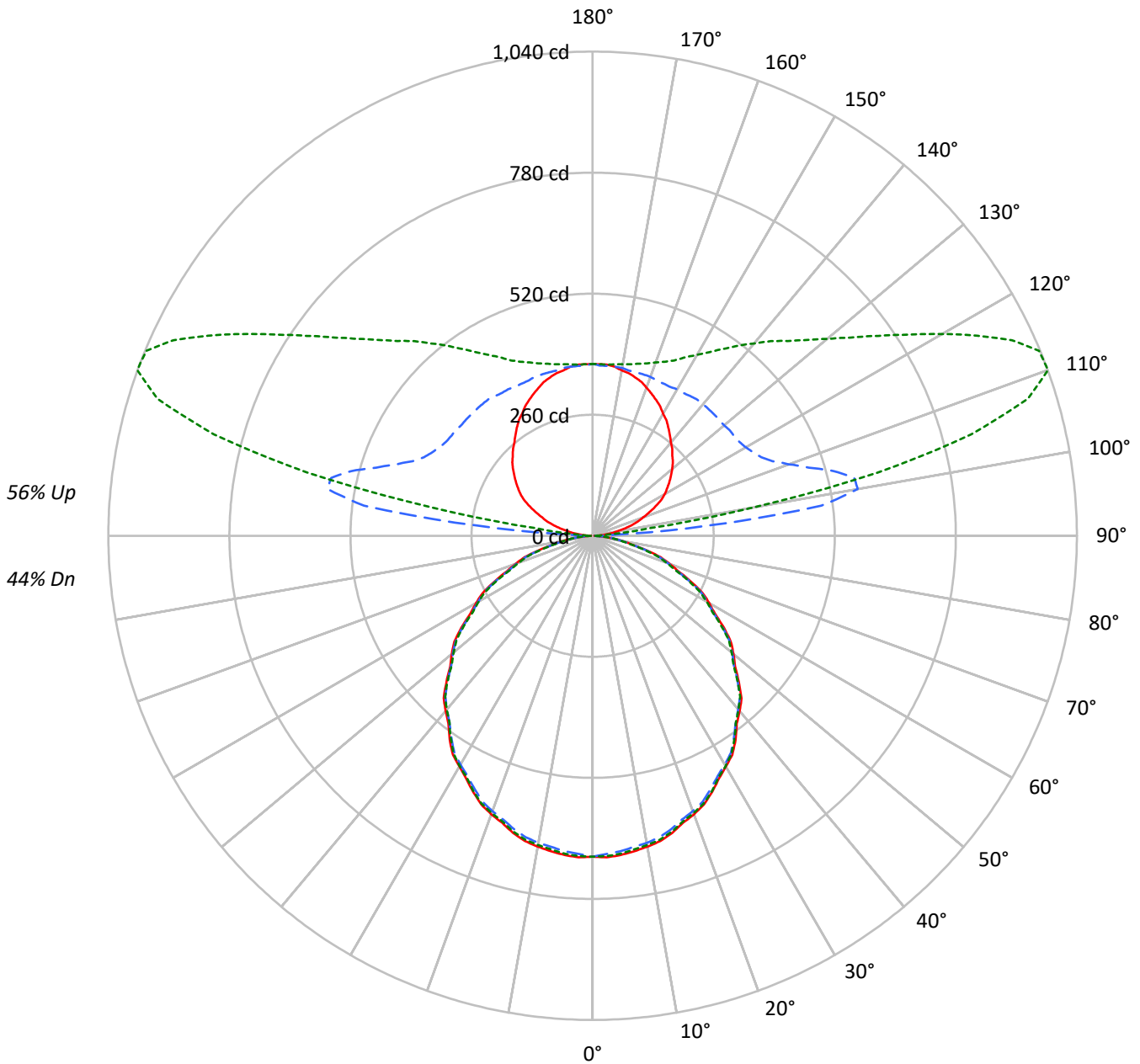
Lumens per Lamp: N/A  
Luminaire Lumens: 4275.8 lumens  
Efficiency: N/A  
Efficacy: 119.4 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35  
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')  
CIE Type: General Diffuse

Input Watts (W): 35.8  
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					20					
RC	80					70					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	106	106	106	106	97	97	97	97	80	80	80	65	65	65	51	51	51	44								
1	96	92	88	85	88	84	81	78	70	68	66	57	55	54	45	44	43	37								
2	88	80	74	69	80	74	68	64	61	57	54	50	47	45	39	37	36	31								
3	80	71	63	57	73	65	58	53	54	49	45	44	41	38	35	32	30	26								
4	73	62	54	48	67	57	50	45	48	43	39	39	35	32	31	28	26	22								
5	67	55	47	41	61	51	44	39	43	37	33	35	31	28	28	25	23	19								
6	62	50	42	36	56	46	39	33	38	33	29	32	27	24	25	22	20	17								
7	57	45	37	31	52	41	34	29	35	29	25	29	25	21	23	20	18	15								
8	53	41	33	28	48	37	31	26	32	26	22	26	22	19	21	18	16	13								
9	49	37	30	24	45	34	28	23	29	24	20	24	20	17	19	16	14	12								
10	46	34	27	22	42	31	25	21	27	22	18	22	18	15	18	15	13	11								

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

	0°	45°	90°
0°	6360	6360	6360
5°	6376	6299	6350
10°	6353	6275	6319
15°	6310	6231	6284
20°	6250	6179	6224
25°	6180	6106	6163
30°	6095	6045	6084
35°	6028	5956	5986
40°	5914	5856	5868
45°	5791	5742	5742
50°	5668	5616	5589
55°	5537	5463	5432
60°	5329	5244	5211
65°	5076	4975	4914
70°	4732	4629	4529
75°	4242	4114	4010
80°	3432	3390	3284
85°	2032	2350	2435



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	65.0	1.5
10°-20°	185.2	4.3
20°-30°	278.2	6.5
30°-40°	332.1	7.8
40°-50°	340.3	8.0
50°-60°	303.4	7.1
60°-70°	226.0	5.3
70°-80°	122.7	2.9
80°-90°	29.3	0.7
90°-100°	146.8	3.4
100°-110°	510.8	11.9
110°-120°	494.8	11.6
120°-130°	388.1	9.1
130°-140°	307.2	7.2
140°-150°	237.1	5.5
150°-160°	169.9	4.0
160°-170°	103.9	2.4
170°-180°	35.2	0.8
0°-30°	528.4	12.4
0°-40°	860.4	20.1
0°-60°	1504.2	35.2
0°-90°	1882.1	44.0
90°-120°	1152.3	26.9
90°-150°	2084.7	48.8
90°-180°	2394.0	56.0
0°-180°	4275.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	689	689	689	689	689	
5°	688	688	680	686	686	65
15°	661	659	652	658	658	186
25°	607	605	600	604	605	280
35°	535	533	529	529	532	334
45°	444	445	440	439	440	343
55°	344	344	340	337	338	307
65°	232	232	228	225	225	230
75°	119	118	115	114	112	126
85°	19	21	22	23	23	27
90°	6	8	8	6	3	4
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	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	689.3	689.3	689.3	689.3	689.3
2.5°	691.4	690.0	684.0	689.3	688.6
5°	688.4	687.5	680.1	686.4	685.6
7.5°	683.4	681.6	674.3	680.6	679.7
10°	678.1	676.3	669.8	675.4	674.5
12.5°	671.6	670.5	663.3	668.8	668.6
15°	660.6	658.8	652.3	657.9	657.9
17.5°	646.2	645.2	638.8	644.1	643.6
20°	636.6	634.9	629.3	633.9	633.9
22.5°	624.8	623.8	618.2	622.1	622.8
25°	607.1	605.4	599.8	603.5	605.4
27.5°	587.6	586.2	581.6	583.9	585.2
30°	572.1	572.1	567.4	568.5	571.1
32.5°	558.1	558.1	552.7	553.7	554.9
35°	535.2	533.4	528.8	528.8	531.5
37.5°	508.6	507.7	504.8	504.2	505.0
40°	491.0	490.0	486.2	487.2	487.2
42.5°	473.3	472.2	468.5	467.3	468.7
45°	443.8	444.8	440.1	439.2	440.1
47.5°	415.0	415.0	411.2	408.6	410.0
50°	394.9	394.9	391.3	389.4	389.4
52.5°	374.2	375.0	370.4	368.0	368.7
55°	344.2	344.2	339.6	336.8	337.7
57.5°	310.9	310.9	306.4	303.6	305.2
60°	288.8	288.8	284.2	281.4	282.4
62.5°	266.7	266.7	262.1	259.3	259.4
65°	232.5	231.6	227.9	225.1	225.1
67.5°	199.6	197.3	194.5	190.9	190.9
70°	175.4	174.3	171.6	167.9	167.9
72.5°	153.2	151.6	148.7	145.9	145.9
75°	119.0	118.1	115.4	113.5	112.5
77.5°	85.3	84.5	84.3	81.8	82.5
80°	64.6	64.6	63.8	61.8	61.8
82.5°	46.1	46.8	45.2	44.8	44.1
85°	19.2	21.1	22.2	23.0	23.0
87.5°	3.8	5.8	5.1	5.9	5.9
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



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**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)