

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: P844942

Luminaire Tested: **SQ4P-F-100U-050D-B50-1D-UNV**

Issue Date: 8/14/2023

Test Information

Test Method: LM-79-08
Report Number: P844942
REPORT IS A COMBINATION OF REPORTS P700079 AND P700246
Test Lab: INNOVATION CENTER
Issue Date: 8/14/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4P-F-100U-050D-B50-1D-UNV
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, 1000 LUMENS PER FOOT UPLIGHT, 500 LUMENS PER FOOT DOWNLIGHT

Light Source: -
Ballast/Driver: -

Summary

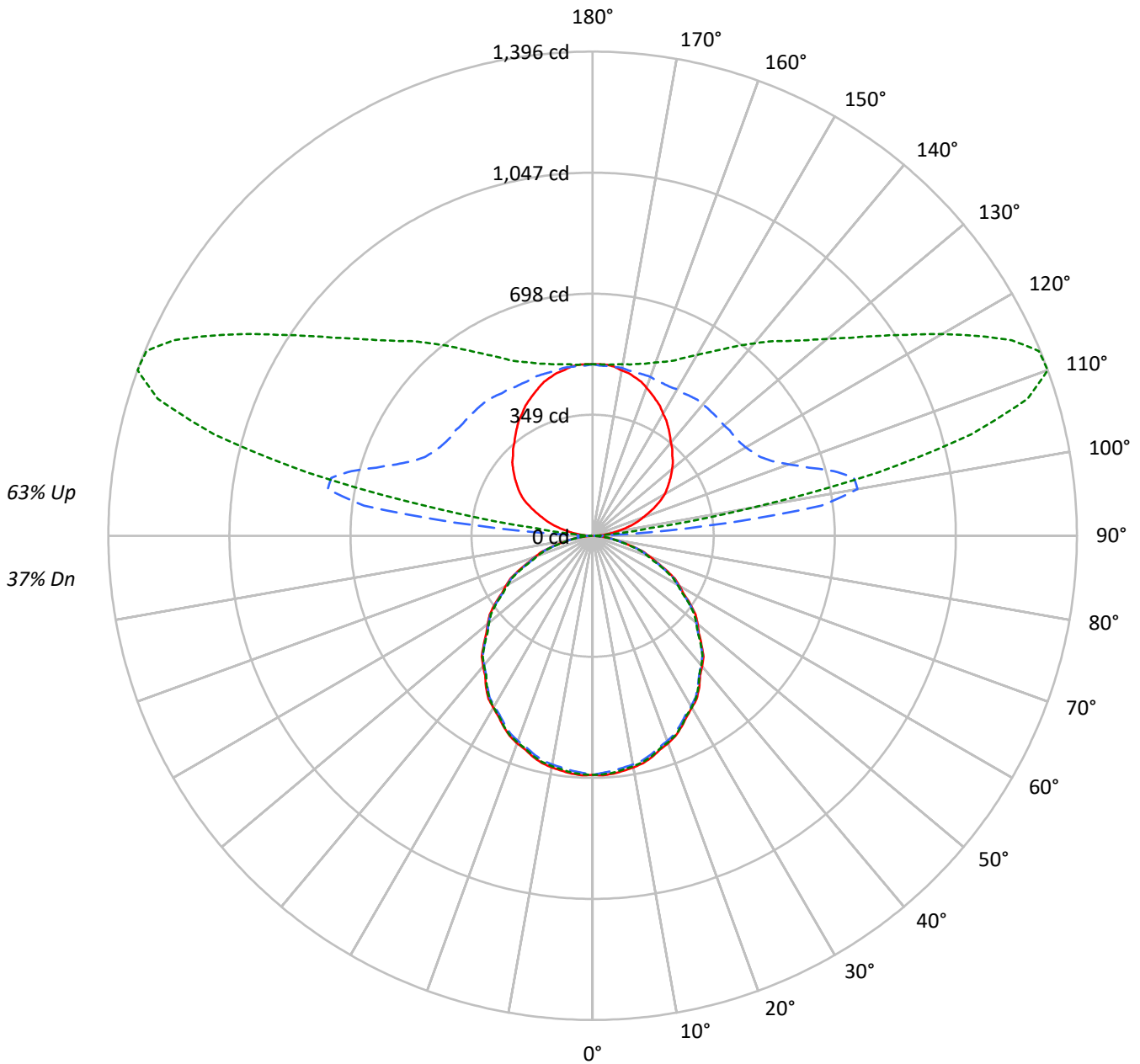
Lumens per Lamp: N/A
Luminaire Lumens: 5093.7 lumens
Efficiency: N/A
Efficacy: 119.0 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 42.8
Input Voltage (V): NR
Input Current (A_{in}): 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	104	104	104	104	94	94	94	94	76	76	76	59	59	59	44	44	44	37																			
1	95	91	87	83	86	82	79	76	67	64	62	52	51	49	39	38	37	31																			
2	86	79	73	68	78	72	67	62	58	55	51	46	43	41	34	33	31	26																			
3	79	69	62	56	71	63	57	52	51	47	43	40	37	35	30	28	26	22																			
4	72	61	54	48	65	56	49	44	45	41	37	36	32	30	27	25	23	19																			
5	66	54	46	41	59	50	43	38	41	35	31	32	28	26	24	22	20	16																			
6	61	49	41	35	55	44	37	32	36	31	27	29	25	22	22	19	17	14																			
7	56	44	36	31	50	40	33	28	33	28	24	26	22	20	20	17	15	13																			
8	52	40	32	27	47	36	30	25	30	25	21	24	20	17	18	16	14	11																			
9	48	36	29	24	44	33	27	22	27	22	19	22	18	16	17	14	12	10																			
10	45	33	26	21	41	30	24	20	25	20	17	20	17	14	16	13	11	9																			

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	1.3
10°-20°	185.2	3.6
20°-30°	278.2	5.5
30°-40°	332.1	6.5
40°-50°	340.3	6.7
50°-60°	303.4	6.0
60°-70°	226.0	4.4
70°-80°	122.7	2.4
80°-90°	29.6	0.6
90°-100°	196.9	3.9
100°-110°	685.2	13.5
110°-120°	663.7	13.0
120°-130°	520.7	10.2
130°-140°	412.1	8.1
140°-150°	318.0	6.2
150°-160°	228.0	4.5
160°-170°	139.4	2.7
170°-180°	47.2	0.9
0°-30°	528.4	10.4
0°-40°	860.4	16.9
0°-60°	1504.2	29.5
0°-90°	1882.4	37.0
90°-120°	1545.9	30.3
90°-150°	2796.7	54.9
90°-180°	3211.0	63.0
0°-180°	5093.7	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°	7	11	11	7	4	5
95°	33	114	332	85	52	35
105°	114	162	720	1215	1130	120
115°	199	240	535	1130	1333	197
125°	270	332	498	842	1004	241
135°	325	366	495	702	794	252
145°	380	406	491	606	657	238
155°	432	447	484	539	558	199
165°	473	476	487	510	513	133
175°	495	495	491	498	495	47
180°	495	495	495	495	495	



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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°	7.4	11.0	11.0	7.4	3.7
92.5°	18.5	55.4	51.7	22.2	18.5
95°	33.2	114.4	332.4	84.9	51.7
97.5°	51.7	129.3	664.7	302.8	162.5
100°	70.2	136.6	775.4	727.4	469.0
102.5°	92.3	147.7	771.7	1022.9	841.9
105°	114.4	162.5	720.0	1214.9	1130.0



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	177.3	217.8	561.3	1222.2	1392.1
115°	199.4	240.0	535.4	1130.0	1333.0
117.5°	221.5	265.9	520.7	1045.0	1248.1
120°	240.0	288.0	509.6	963.7	1163.2
122.5°	254.8	310.2	502.2	897.3	1078.3
125°	269.5	332.4	498.5	841.9	1004.4
127.5°	284.4	347.1	498.5	801.3	937.9
130°	299.1	354.5	494.8	760.7	882.5
132.5°	313.9	358.2	494.8	731.2	834.5
135°	324.9	365.6	494.8	701.6	793.9
137.5°	339.7	372.9	494.8	675.7	760.7
140°	350.8	384.0	494.8	649.9	723.7
142.5°	365.6	395.1	494.8	624.1	690.5
145°	380.3	406.2	491.1	605.6	657.3
147.5°	395.1	417.3	487.4	587.1	627.8
150°	406.2	428.3	487.4	568.6	601.9
152.5°	421.0	439.5	483.7	550.2	579.8
155°	432.0	446.8	483.7	539.1	557.6
157.5°	443.1	457.9	483.7	528.1	542.8
160°	454.2	465.3	487.4	520.7	531.7
162.5°	465.3	472.7	487.4	513.2	520.7
165°	472.7	476.4	487.4	509.6	513.2
167.5°	480.0	483.7	487.4	505.9	505.9
170°	483.7	487.4	491.1	502.2	502.2
172.5°	491.1	491.1	491.1	498.5	498.5
175°	494.8	494.8	491.1	498.5	494.8
177.5°	494.8	494.8	491.1	498.5	494.8
180°	494.8	494.8	494.8	494.8	494.8



Report Generated By 670246072 / DESKTOP-50001EG





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







107.5°	136.6	181.0	653.6	1299.8	1314.6
110°	155.1	199.4	601.9	1288.8	1395.8



(END OF REPORT)