

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: P844945

Luminaire Tested: **SQ4P-F-100U-075D-B50-1D-UNV**

Issue Date: 8/14/2023



Test Information

Test Method: LM-79-08
Report Number: P844945
REPORT IS A COMBINATION OF REPORTS P700080 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-075D-B50-1D-UNV
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, 1000 LUMENS PER FOOT UPLIGHT, 750 LUMENS PER FOOT DOWNLIGHT

Light Source: -
Ballast/Driver: -

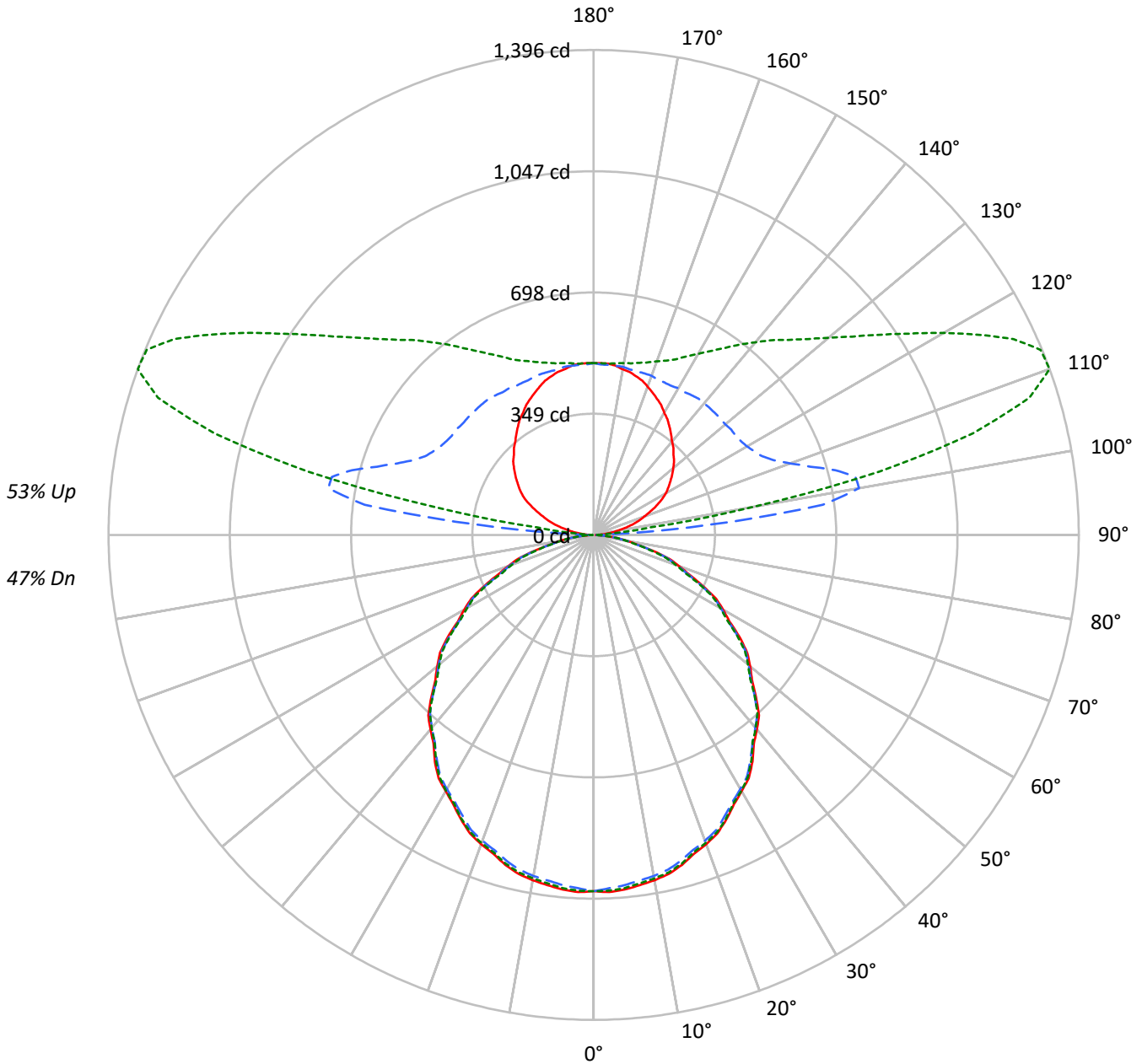
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6012.4 lumens
Efficiency: N/A
Efficacy: 116.5 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): 51.6
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				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	98	98	98	98	81	81	81	67	67	67	53	53	53	47	47	47	47
1	97	93	89	85	89	85	82	79	71	69	67	59	57	55	47	46	45	39	39	39	39
2	88	81	75	70	81	74	69	65	62	59	55	51	49	46	41	39	38	33	33	33	33
3	80	71	64	58	74	65	59	54	55	50	46	45	42	39	36	34	32	28	28	28	28
4	74	63	55	49	67	58	51	46	49	44	39	40	36	33	32	30	27	24	24	24	24
5	67	56	48	42	62	52	44	39	44	38	34	36	32	29	29	26	24	20	20	20	20
6	62	50	42	36	57	46	39	34	39	34	29	33	28	25	26	23	21	18	18	18	18
7	57	45	37	32	52	42	35	30	35	30	26	30	25	22	24	21	18	16	16	16	16
8	53	41	33	28	49	38	31	26	32	27	23	27	23	20	22	19	17	14	14	14	14
9	49	37	30	25	45	35	28	23	30	24	20	25	21	18	20	17	15	13	13	13	13
10	46	34	27	22	42	32	25	21	27	22	18	23	19	16	19	16	13	12	12	12	12

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9464	9464	9464
5°	9489	9374	9450
10°	9456	9340	9405
15°	9392	9274	9353
20°	9303	9196	9264
25°	9199	9087	9172
30°	9071	8997	9055
35°	8973	8864	8909
40°	8802	8716	8734
45°	8618	8548	8548
50°	8437	8359	8319
55°	8241	8130	8086
60°	7933	7805	7756
65°	7556	7405	7313
70°	7041	6887	6741
75°	6313	6121	5971
80°	5111	5042	4888
85°	3038	3493	3631



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	96.8	1.6
10°-20°	275.6	4.6
20°-30°	414.0	6.9
30°-40°	494.2	8.2
40°-50°	506.4	8.4
50°-60°	451.6	7.5
60°-70°	336.3	5.6
70°-80°	182.6	3.0
80°-90°	43.5	0.7
90°-100°	196.9	3.3
100°-110°	685.2	11.4
110°-120°	663.7	11.0
120°-130°	520.7	8.7
130°-140°	412.1	6.9
140°-150°	318.0	5.3
150°-160°	228.0	3.8
160°-170°	139.4	2.3
170°-180°	47.2	0.8
0°-30°	786.4	13.1
0°-40°	1280.6	21.3
0°-60°	2238.7	37.2
0°-90°	2801.1	46.6
90°-120°	1545.9	25.7
90°-150°	2796.7	46.5
90°-180°	3211.0	53.4
0°-180°	6012.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1026	1026	1026	1026	1026	
5°	1025	1023	1012	1022	1020	97
15°	983	980	971	979	979	277
25°	904	901	893	898	901	416
35°	797	794	787	787	791	497
45°	660	662	655	654	655	510
55°	512	512	505	501	503	456
65°	346	345	339	335	335	343
75°	177	176	172	169	168	187
85°	29	31	33	34	34	40
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°	1025.8	1025.8	1025.8	1025.8	1025.8
2.5°	1029.0	1026.9	1018.2	1025.8	1024.9
5°	1024.6	1023.1	1012.2	1021.7	1020.4
7.5°	1017.0	1014.5	1003.5	1013.0	1011.6
10°	1009.3	1006.6	997.0	1005.1	1003.9
12.5°	999.5	997.9	987.2	995.4	995.1
15°	983.3	980.5	970.9	979.2	979.2
17.5°	961.9	960.3	950.8	958.7	957.9
20°	947.5	944.9	936.6	943.5	943.5
22.5°	930.0	928.4	920.2	925.8	927.0
25°	903.6	901.0	892.6	898.2	901.0
27.5°	874.5	872.4	865.6	869.1	871.0
30°	851.5	851.5	844.5	846.0	850.0
32.5°	830.6	830.6	822.6	824.1	826.0
35°	796.7	793.9	787.0	787.0	791.0
37.5°	756.9	755.6	751.2	750.5	751.6
40°	730.8	729.3	723.7	725.2	725.2
42.5°	704.3	702.9	697.3	695.5	697.5
45°	660.5	661.9	655.1	653.7	655.1
47.5°	617.6	617.6	612.0	608.2	610.2
50°	587.8	587.8	582.4	579.6	579.6
52.5°	557.0	558.1	551.4	547.7	548.8
55°	512.3	512.3	505.4	501.3	502.7
57.5°	462.8	462.8	456.0	451.8	454.2
60°	429.9	429.9	423.0	418.8	420.3
62.5°	396.9	396.9	390.1	386.0	386.1
65°	346.1	344.8	339.2	335.0	335.0
67.5°	297.1	293.6	289.5	284.0	284.0
70°	261.0	259.5	255.3	249.9	249.9
72.5°	227.9	225.5	221.3	217.1	217.1
75°	177.1	175.6	171.7	169.0	167.5
77.5°	126.9	125.9	125.5	121.7	122.8
80°	96.2	96.2	94.9	92.0	92.0
82.5°	68.6	69.7	67.3	66.6	65.6
85°	28.7	31.4	33.0	34.3	34.3
87.5°	5.6	8.7	7.7	8.9	8.9
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)