

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: P845194

Luminaire Tested: **SQ4P-PR1-100U-050D-B50-1D-UNV**

Issue Date: 8/14/2023



Test Information

Test Method: LM-79-08
Report Number: P845194
REPORT IS A COMBINATION OF REPORTS P700091 AND P700246
Test Lab: INNOVATION CENTER
Issue Date: 8/14/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4P-PR1-100U-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

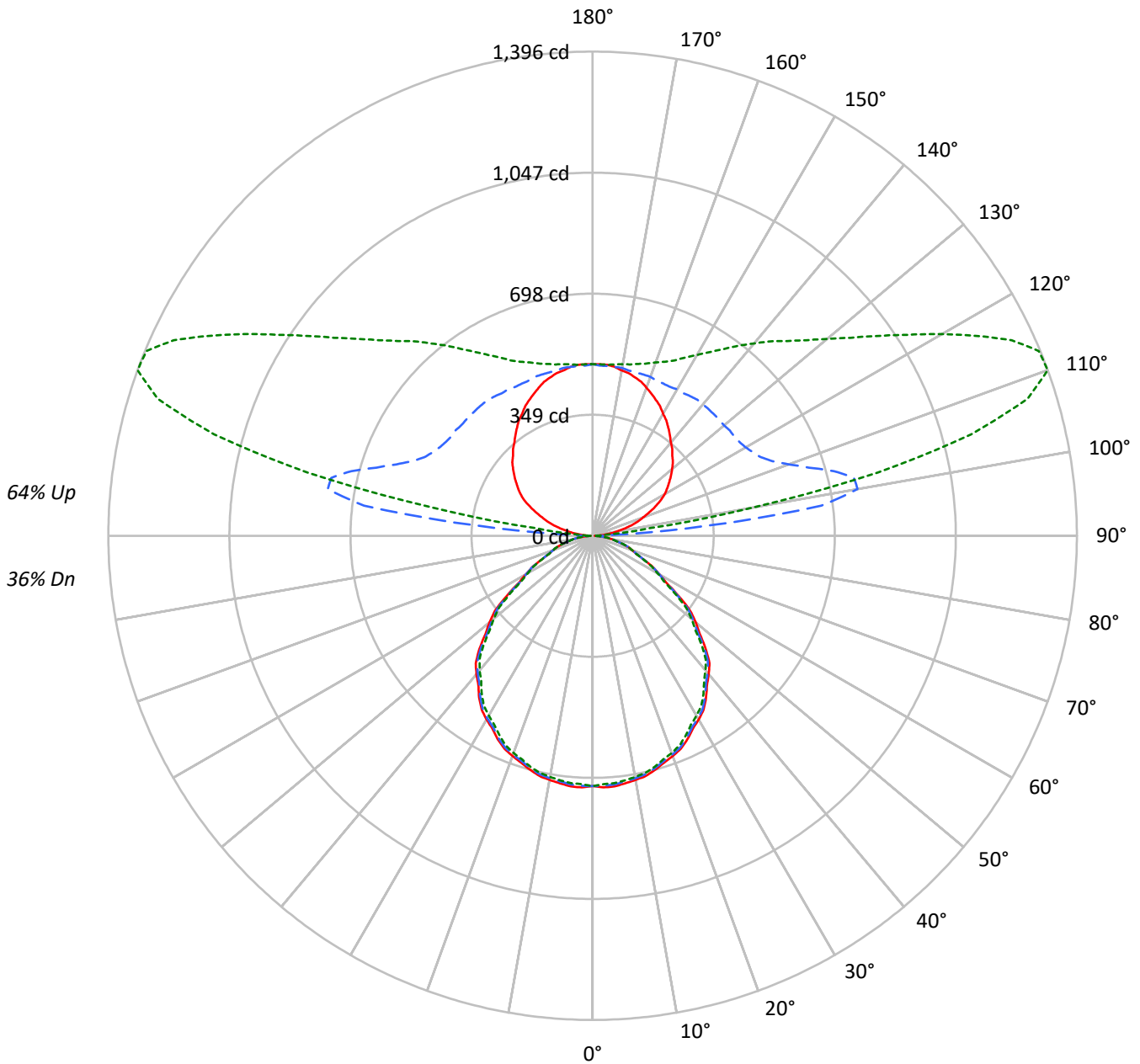
Lumens per Lamp: N/A
Luminaire Lumens: 5016.6 lumens
Efficiency: N/A
Efficacy: 117.2 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Indirect

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				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	104	104	104	104	94	94	94	94	76	76	76	59	59	59	43	43	43	36				36
1	95	91	87	84	86	82	79	76	66	64	62	52	50	49	39	38	37	31				31
2	87	79	74	69	78	72	67	63	58	55	52	46	43	41	34	33	31	26				26
3	79	70	63	57	71	64	58	53	52	47	44	41	38	35	30	29	27	22				22
4	72	62	54	49	65	56	50	45	46	41	37	36	33	30	27	25	23	19				19
5	66	55	47	42	60	50	43	38	41	36	32	33	29	26	25	22	20	17				17
6	61	49	42	36	55	45	38	33	37	32	28	29	26	23	22	20	18	15				15
7	56	45	37	31	51	41	34	29	34	28	25	27	23	20	20	18	16	13				13
8	52	40	33	28	47	37	30	26	31	25	22	24	21	18	19	16	14	12				12
9	49	37	30	25	44	34	27	23	28	23	20	22	19	16	17	15	13	11				11
10	45	34	27	22	41	31	25	20	26	21	18	21	17	15	16	14	12	10				10

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6658	6658	6658
5°	6718	6666	6632
10°	6697	6650	6615
15°	6668	6625	6590
20°	6634	6591	6542
25°	6587	6544	6467
30°	6516	6470	6377
35°	6421	6364	6272
40°	6274	6205	6094
45°	6019	5913	5791
50°	5568	5433	5327
55°	4859	4750	4650
60°	4095	4061	3980
65°	3541	3556	3528
70°	3251	3269	3269
75°	3126	3126	3148
80°	2938	2975	2938
85°	2371	2625	2625



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	68.2	1.4
10°-20°	195.3	3.9
20°-30°	294.5	5.9
30°-40°	350.9	7.0
40°-50°	346.0	6.9
50°-60°	264.4	5.3
60°-70°	163.6	3.3
70°-80°	93.0	1.9
80°-90°	29.5	0.6
90°-100°	196.9	3.9
100°-110°	685.2	13.7
110°-120°	663.7	13.2
120°-130°	520.7	10.4
130°-140°	412.1	8.2
140°-150°	318.0	6.3
150°-160°	228.0	4.5
160°-170°	139.4	2.8
170°-180°	47.2	0.9
0°-30°	558.0	11.1
0°-40°	908.9	18.1
0°-60°	1519.3	30.3
0°-90°	1805.3	36.0
90°-120°	1545.9	30.8
90°-150°	2796.7	55.7
90°-180°	3211.0	64.0
0°-180°	5016.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	722	722	722	722	722	
5°	725	717	720	717	716	69
15°	698	691	694	691	690	197
25°	647	639	643	636	635	298
35°	570	563	565	558	557	356
45°	461	455	453	445	444	353
55°	302	297	295	290	289	271
65°	162	161	163	162	162	164
75°	88	88	88	88	88	93
85°	22	24	25	25	25	26
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°	721.6	721.6	721.6	721.6	721.6
2.5°	726.1	719.8	721.6	720.1	716.7
5°	725.4	717.4	719.8	717.3	716.1
7.5°	719.8	712.0	714.4	711.8	711.2
10°	714.8	707.5	709.8	707.4	706.1
12.5°	709.4	701.6	704.4	701.4	700.2
15°	698.1	690.8	693.6	691.2	689.9
17.5°	685.6	677.8	680.8	677.9	676.3
20°	675.7	668.4	671.3	667.0	666.3
22.5°	664.7	657.5	660.3	654.6	654.4
25°	647.1	639.1	642.8	636.0	635.3
27.5°	626.1	618.8	621.7	614.7	614.1
30°	611.6	604.3	607.3	599.8	598.6
32.5°	595.2	588.4	590.9	583.4	582.6
35°	570.1	563.3	565.0	557.6	556.9
37.5°	541.3	535.2	536.2	527.9	527.4
40°	520.9	514.9	515.2	506.6	506.0
42.5°	498.6	492.5	491.9	483.2	482.6
45°	461.3	455.2	453.2	445.0	443.8
47.5°	418.7	412.6	408.9	402.2	401.4
50°	387.9	381.8	378.5	372.9	371.1
52.5°	354.5	348.4	345.8	340.6	338.8
55°	302.1	297.2	295.3	290.3	289.1
57.5°	252.2	249.0	248.4	243.5	243.1
60°	221.9	220.1	220.1	215.7	215.7
62.5°	196.1	194.7	195.6	192.8	192.3
65°	162.2	161.1	162.9	161.6	161.6
67.5°	135.6	135.6	136.6	136.0	136.0
70°	120.5	120.5	121.2	121.2	121.2
72.5°	107.1	106.7	108.3	108.2	107.8
75°	87.7	87.7	87.7	88.3	88.3
77.5°	68.3	68.4	68.9	68.8	68.3
80°	55.3	56.0	56.0	55.3	55.3
82.5°	42.5	42.9	42.9	42.8	42.5
85°	22.4	23.6	24.8	24.8	24.8
87.5°	6.5	8.4	10.0	10.0	9.4
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)