

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: P845170

Luminaire Tested: **SQ4P-PR1-075U-050D-B50-1D-UNV**

Issue Date: 8/14/2023

Test Information

Test Method: LM-79-08
Report Number: P845170
REPORT IS A COMBINATION OF REPORTS P700231 AND P700245
Test Lab: INNOVATION CENTER
Issue Date: 8/14/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4P-PR1-075U-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: -

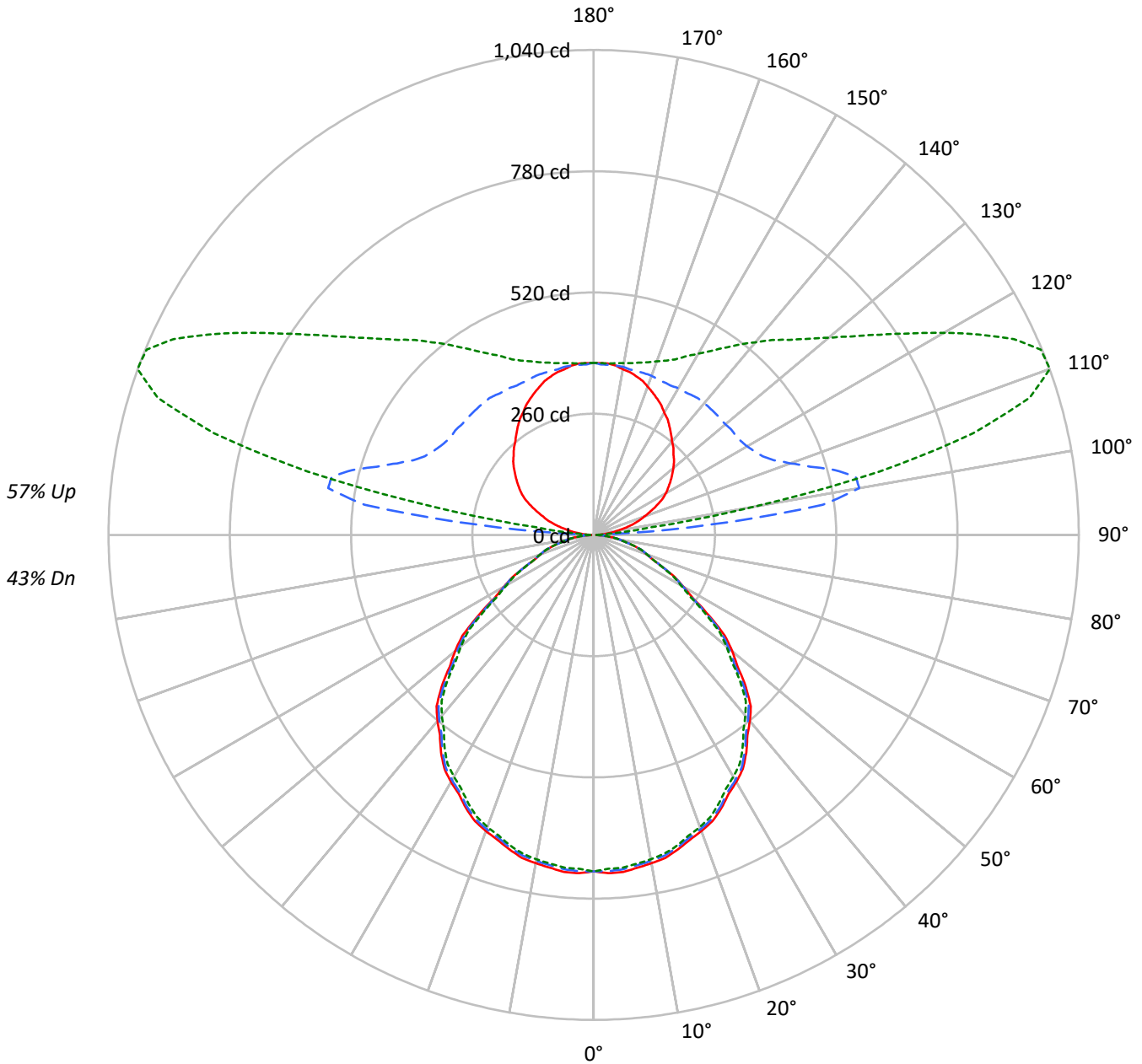
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4198.7 lumens
Efficiency: N/A
Efficacy: 117.3 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: General Diffuse

Input Watts (W): 35.8
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					
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	105	105	105	105	96	96	96	96	79	79	79	64	64	64	50	50	50	43								
1	96	92	89	85	88	84	81	78	70	68	66	57	55	54	44	43	42	37								
2	88	81	75	70	80	74	69	65	62	58	55	50	47	45	39	38	36	31								
3	80	71	64	58	73	65	59	54	55	50	46	44	41	38	35	33	31	27								
4	74	63	55	50	67	58	51	46	49	44	40	40	36	33	31	29	27	23								
5	68	56	48	43	62	52	45	40	43	38	34	36	32	29	28	26	23	20								
6	62	50	43	37	57	47	40	35	39	34	30	32	28	25	26	23	21	18								
7	58	46	38	32	53	42	35	30	36	30	26	29	25	22	24	21	18	16								
8	53	41	34	29	49	38	32	27	32	27	23	27	23	20	22	19	17	14								
9	50	38	30	25	45	35	28	24	30	24	21	25	21	18	20	17	15	13								
10	46	35	27	23	42	32	26	21	27	22	19	23	19	16	18	16	14	12								

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	1.6
10°-20°	195.3	4.7
20°-30°	294.5	7.0
30°-40°	350.9	8.4
40°-50°	346.0	8.2
50°-60°	264.4	6.3
60°-70°	163.6	3.9
70°-80°	93.0	2.2
80°-90°	29.2	0.7
90°-100°	146.8	3.5
100°-110°	510.8	12.2
110°-120°	494.8	11.8
120°-130°	388.1	9.2
130°-140°	307.2	7.3
140°-150°	237.1	5.6
150°-160°	169.9	4.0
160°-170°	103.9	2.5
170°-180°	35.2	0.8
0°-30°	558.0	13.3
0°-40°	908.9	21.6
0°-60°	1519.3	36.2
0°-90°	1805.0	43.0
90°-120°	1152.3	27.4
90°-150°	2084.7	49.7
90°-180°	2394.0	57.0
0°-180°	4198.7	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°	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°	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°	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)