

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: P844822

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

Issue Date: 8/14/2023



Test Information

Test Method: LM-79-08
Report Number: P844822
REPORT IS A COMBINATION OF REPORTS P700187 AND P700244
Test Lab: INNOVATION CENTER
Issue Date: 8/14/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4P-BB-050U-050D-B50-1D-UNV
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, 500 LUMENS PER FOOT
UPLIGHT, 500 LUMENS PER FOOT DOWNLIGHT

Light Source: -
Ballast/Driver: -

Summary

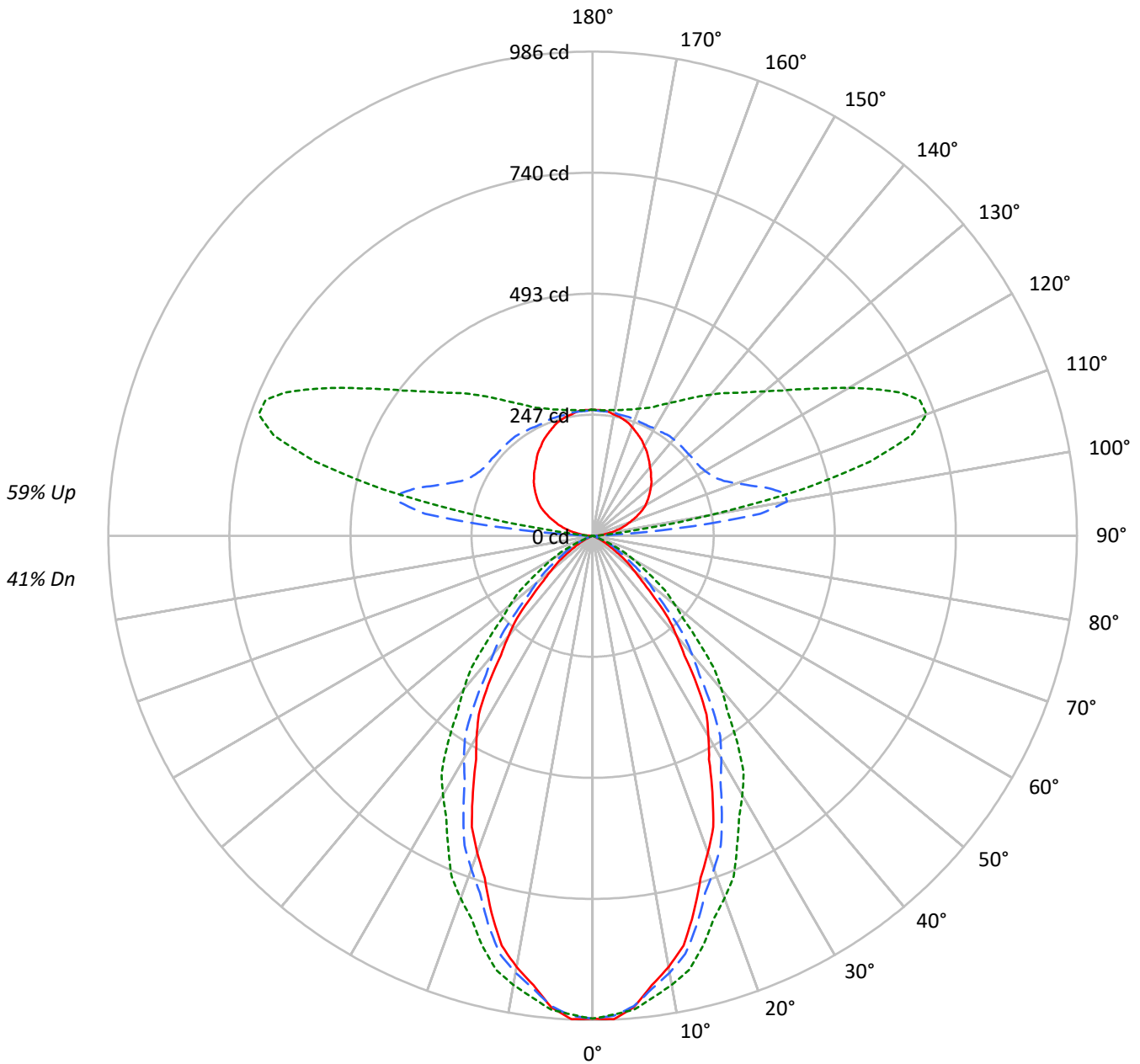
Lumens per Lamp: N/A
Luminaire Lumens: 2837.4 lumens
Efficiency: N/A
Efficacy: 95.2 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 29.8
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	105	105	105	105	96	96	96	96	79	79	79	63	63	63	48	48	48	41																			
1	97	94	90	87	89	86	83	80	71	69	67	57	56	55	45	44	44	38																			
2	90	83	78	74	82	77	72	69	64	61	58	52	50	48	41	40	39	34																			
3	83	75	68	63	76	69	63	59	58	54	51	48	45	43	38	36	35	31																			
4	77	67	60	55	70	62	56	52	52	48	45	43	40	38	35	33	32	28																			
5	71	61	54	48	65	56	50	45	48	43	40	40	37	34	32	30	29	25																			
6	66	55	48	43	60	51	45	40	44	39	35	37	33	31	30	28	26	23																			
7	61	50	43	38	56	47	40	36	40	35	32	34	30	28	28	26	24	21																			
8	57	46	39	34	53	43	37	32	37	32	29	31	28	25	26	24	22	19																			
9	53	42	36	31	49	40	33	29	34	29	26	29	26	23	24	22	20	18																			
10	50	39	32	28	46	37	31	27	32	27	24	27	24	21	23	20	19	17																			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9072	9072	9072
5°	8925	8904	8970
10°	8351	8464	8699
15°	7592	7833	8270
20°	6739	7090	7710
25°	5869	6333	7084
30°	5027	5579	6491
35°	4168	4736	5776
40°	3202	3788	4921
45°	2316	2868	3960
50°	1577	2136	3142
55°	1026	1546	2442
60°	589	1089	1766
65°	155	666	893
70°	81	205	256
75°	36	18	0
80°	27	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	89.7	3.2
10°-20°	229.5	8.1
20°-30°	287.3	10.1
30°-40°	265.3	9.4
40°-50°	178.3	6.3
50°-60°	92.1	3.2
60°-70°	28.8	1.0
70°-80°	1.8	0.1
80°-90°	0.7	0.0
90°-100°	102.0	3.6
100°-110°	355.0	12.5
110°-120°	343.9	12.1
120°-130°	269.8	9.5
130°-140°	213.5	7.5
140°-150°	164.8	5.8
150°-160°	118.1	4.2
160°-170°	72.3	2.5
170°-180°	24.4	0.9
0°-30°	606.5	21.4
0°-40°	871.8	30.7
0°-60°	1142.2	40.3
0°-90°	1173.6	41.4
90°-120°	800.9	28.2
90°-150°	1449.0	51.1
90°-180°	1664.0	58.6
0°-180°	2837.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	983	983	983	983	983	
5°	964	954	961	965	968	89
15°	795	792	820	848	866	221
25°	576	581	622	665	696	264
35°	370	379	420	470	513	229
45°	178	188	220	263	304	139
55°	64	74	96	123	152	60
65°	7	14	30	37	41	12
75°	1	1	0	0	0	1
85°	0	0	0	0	0	0
90°	4	6	6	4	2	2
95°	17	59	172	44	27	18
105°	59	84	373	629	585	62
115°	103	124	277	585	691	102
125°	140	172	258	436	520	125
135°	168	189	256	364	411	130
145°	197	210	254	314	340	123
155°	224	232	251	279	289	103
165°	245	247	253	264	266	69
175°	256	256	254	258	256	24
180°	256	256	256	256	256	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	983.3	983.3	983.3	983.3	983.3
2.5°	985.5	976.2	978.6	978.6	976.0
5°	963.7	953.9	961.4	964.7	968.5
7.5°	923.1	915.4	929.7	940.1	947.9
10°	891.4	884.9	903.4	917.8	928.5
12.5°	854.8	849.8	872.1	892.0	905.7
15°	794.8	792.1	820.1	847.6	865.8
17.5°	730.6	730.5	762.4	796.7	818.5
20°	686.4	687.8	722.1	759.8	785.3
22.5°	642.2	645.5	682.1	721.4	750.8
25°	576.5	581.1	622.1	664.8	695.9
27.5°	513.3	520.2	563.3	607.5	645.5
30°	471.9	479.8	523.7	570.3	609.3
32.5°	431.1	440.6	483.3	532.7	572.4
35°	370.1	379.4	420.5	470.0	512.8
37.5°	307.0	316.1	356.2	405.0	451.3
40°	265.9	276.1	314.5	361.7	408.6
42.5°	228.7	238.9	274.8	321.2	365.6
45°	177.5	188.1	219.8	262.6	303.5
47.5°	135.1	146.6	174.3	213.2	250.4
50°	109.9	121.5	148.8	183.0	218.9
52.5°	89.7	101.0	125.7	157.8	190.6
55°	63.8	74.4	96.1	123.4	151.8
57.5°	44.1	53.3	72.7	95.4	117.7
60°	31.9	40.7	59.0	77.4	95.7
62.5°	21.2	29.3	47.1	61.4	73.6
65°	7.1	13.7	30.5	36.7	40.9
67.5°	3.6	4.3	15.9	16.9	18.3
70°	3.0	3.0	7.6	8.1	9.5
72.5°	2.0	2.0	3.0	3.9	4.2
75°	1.0	1.0	0.5	0.0	0.0
77.5°	0.5	0.5	0.5	0.0	0.0
80°	0.5	0.5	0.0	0.0	0.0
82.5°	0.1	0.1	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0
90°	3.8	5.7	5.7	3.8	1.9
92.5°	9.5	28.7	26.8	11.5	9.5
95°	17.2	59.3	172.2	44.0	26.8
97.5°	26.8	66.9	344.3	156.9	84.2
100°	36.4	70.8	401.8	376.9	243.0
102.5°	47.8	76.5	399.9	529.9	436.2
105°	59.3	84.2	373.1	629.4	585.4



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	91.9	112.9	290.8	633.3	721.3
115°	103.3	124.3	277.4	585.4	690.6
117.5°	114.8	137.8	269.7	541.4	646.6
120°	124.3	149.2	264.0	499.3	602.6
122.5°	132.0	160.7	260.2	464.9	558.6
125°	139.7	172.2	258.3	436.2	520.4
127.5°	147.3	179.8	258.3	415.2	485.9
130°	155.0	183.6	256.4	394.1	457.3
132.5°	162.6	185.5	256.4	378.8	432.4
135°	168.3	189.4	256.4	363.5	411.4
137.5°	176.0	193.3	256.4	350.1	394.1
140°	181.7	199.0	256.4	336.7	375.0
142.5°	189.4	204.7	256.4	323.3	357.8
145°	197.1	210.5	254.5	313.8	340.5
147.5°	204.7	216.2	252.6	304.2	325.2
150°	210.5	221.9	252.6	294.7	311.9
152.5°	218.1	227.6	250.7	285.0	300.4
155°	223.8	231.5	250.7	279.3	288.8
157.5°	229.5	237.2	250.7	273.6	281.2
160°	235.3	241.1	252.6	269.7	275.5
162.5°	241.1	244.9	252.6	265.9	269.7
165°	244.9	246.8	252.6	264.0	265.9
167.5°	248.7	250.7	252.6	262.1	262.1
170°	250.7	252.6	254.5	260.2	260.2
172.5°	254.5	254.5	254.5	258.3	258.3
175°	256.4	256.4	254.5	258.3	256.4
177.5°	256.4	256.4	254.5	258.3	256.4
180°	256.4	256.4	256.4	256.4	256.4



Report Generated By 670246072 / DESKTOP-50001EG





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







107.5°	70.8	93.8	338.6	673.5	681.1
110°	80.4	103.3	311.9	667.7	723.2



(END OF REPORT)