

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: P845325

Luminaire Tested: **SQ4P-WB-050U-050D-B40-1D-UNV**

Issue Date: 8/14/2023



**Test Information**

Test Method: LM-79-08  
Report Number: P845325  
REPORT IS A COMBINATION OF REPORTS P700211 AND P700244  
Test Lab: INNOVATION CENTER  
Issue Date: 8/14/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: SQ4P-WB-050U-050D-B40-1D-UNV  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, 500 LUMENS PER FOOT  
UPLIGHT, 500 LUMENS PER FOOT DOWNLIGHT  
  
Light Source: -  
Ballast/Driver: -

**Summary**

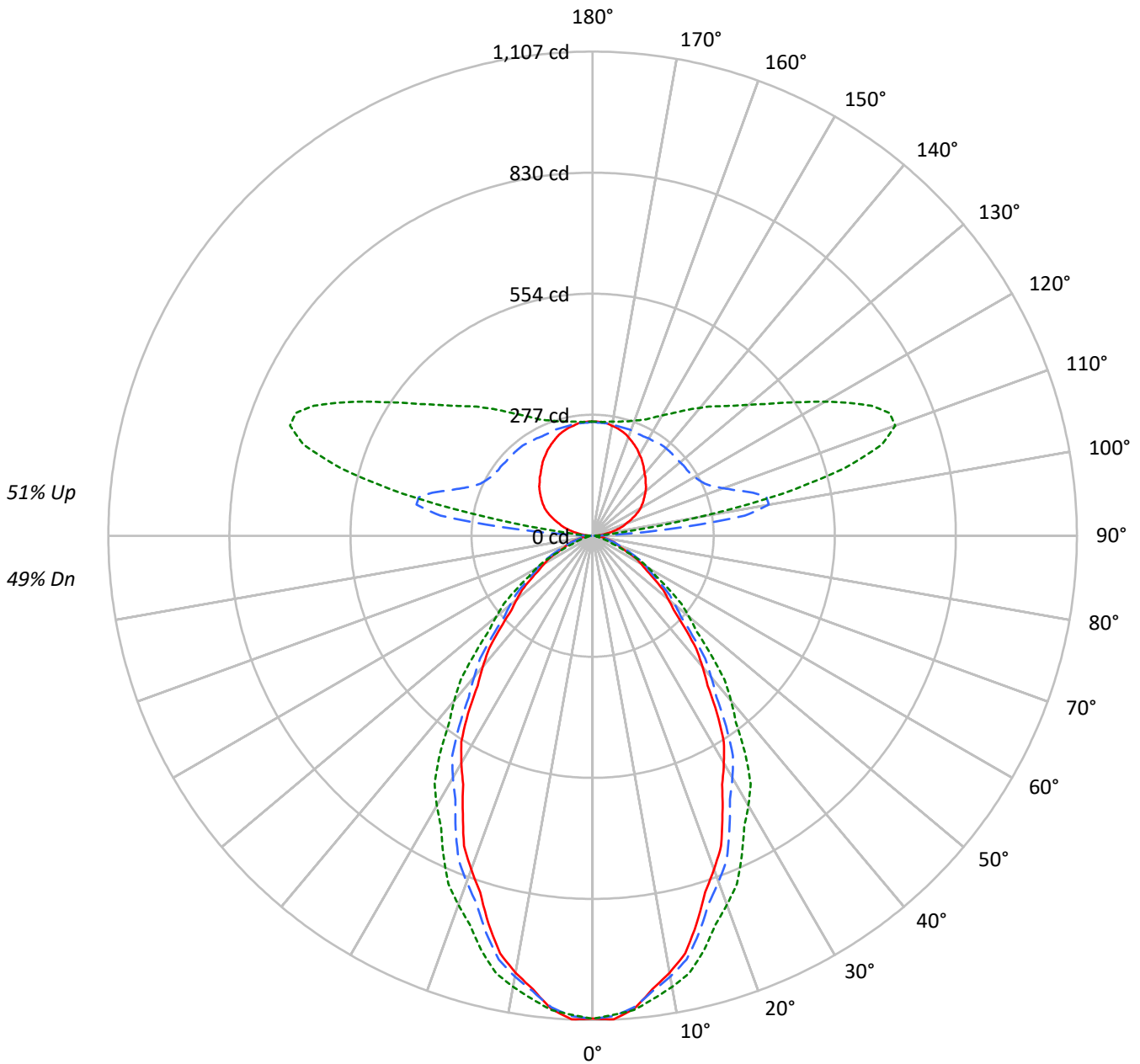
Lumens per Lamp: N/A  
Luminaire Lumens: 3302.8 lumens  
Efficiency: N/A  
Efficacy: 110.8 lumens/watt  
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02  
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')  
CIE Type: General Diffuse

Input Watts (W): 29.8  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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	107	107	107	107	98	98	98	98	83	83	83	68	68	68	55	55	55	49																			
1	99	95	91	88	91	88	85	82	74	72	70	62	60	59	50	49	49	43																			
2	91	84	79	74	84	78	73	69	66	63	60	56	53	51	46	44	43	38																			
3	84	75	68	63	77	70	64	59	60	55	52	50	47	45	42	39	38	34																			
4	77	67	60	54	71	62	56	51	54	49	45	46	42	39	38	36	34	30																			
5	71	60	53	47	66	56	50	45	49	44	40	42	38	35	35	32	30	27																			
6	66	55	47	42	61	51	45	40	44	39	35	38	34	31	32	29	27	24																			
7	61	50	42	37	57	47	40	35	41	35	32	35	31	28	30	27	25	22																			
8	57	46	38	33	53	43	36	32	37	32	29	32	28	26	28	25	22	20																			
9	53	42	35	30	50	39	33	29	35	30	26	30	26	23	26	23	21	19																			
10	50	39	32	27	47	36	30	26	32	27	24	28	24	21	24	21	19	17																			

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	10186	10186	10186
5°	10058	10023	10081
10°	9503	9589	9812
15°	8772	8977	9379
20°	7967	8265	8812
25°	7145	7535	8211
30°	6390	6807	7585
35°	5587	5990	6848
40°	4701	5075	5928
45°	3880	4216	4949
50°	3240	3531	4122
55°	2749	3030	3404
60°	2351	2629	2718
65°	1873	2209	1753
70°	1659	1726	1071
75°	1536	1397	656
80°	1413	1286	569
85°	1270	1175	466



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	101.3	3.1
10°-20°	263.4	8.0
20°-30°	341.1	10.3
30°-40°	334.1	10.1
40°-50°	255.7	7.7
50°-60°	170.4	5.2
60°-70°	93.0	2.8
70°-80°	38.7	1.2
80°-90°	11.6	0.4
90°-100°	103.8	3.1
100°-110°	361.4	10.9
110°-120°	350.0	10.6
120°-130°	274.6	8.3
130°-140°	217.3	6.6
140°-150°	167.7	5.1
150°-160°	120.2	3.6
160°-170°	73.5	2.2
170°-180°	24.9	0.8
0°-30°	705.8	21.4
0°-40°	1039.8	31.5
0°-60°	1465.9	44.4
0°-90°	1609.3	48.7
90°-120°	815.2	24.7
90°-150°	1474.9	44.7
90°-180°	1694.0	51.3
0°-180°	3302.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1104	1104	1104	1104	1104	
5°	1086	1075	1082	1085	1088	101
15°	918	915	940	965	982	256
25°	702	704	740	772	807	323
35°	496	498	532	568	608	308
45°	297	303	323	348	379	232
55°	171	178	188	196	212	155
65°	86	93	101	88	80	89
75°	43	43	39	27	18	46
85°	12	12	11	7	4	13
90°	4	6	6	4	2	3
95°	18	60	175	45	27	19
105°	60	86	380	641	596	63
115°	105	127	282	596	703	104
125°	142	175	263	444	530	127
135°	171	193	261	370	419	133
145°	201	214	259	319	347	125
155°	228	236	255	284	294	105
165°	249	251	257	269	271	70
175°	261	261	259	263	261	25
180°	261	261	261	261	261	



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CATALOG NUMBER: SQ4P-WB-050U-050D-B40-1D-UNV

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1104.0	1104.0	1104.0	1104.0	1104.0
2.5°	1106.7	1096.8	1099.3	1099.2	1096.1
5°	1086.0	1075.1	1082.2	1084.7	1088.5
7.5°	1045.7	1037.5	1050.3	1059.8	1067.4
10°	1014.3	1007.2	1023.5	1037.4	1047.3
12.5°	978.0	971.9	992.2	1010.6	1023.6
15°	918.4	915.1	939.8	965.3	981.9
17.5°	854.8	853.2	881.5	911.3	932.4
20°	811.4	810.9	841.8	873.0	897.5
22.5°	767.6	768.6	801.1	833.5	861.6
25°	701.9	703.8	740.2	772.4	806.6
27.5°	641.1	642.0	679.5	713.6	750.1
30°	599.8	602.0	638.9	674.2	712.0
32.5°	558.3	561.0	597.1	633.5	672.1
35°	496.0	498.4	531.8	567.7	608.0
37.5°	431.8	435.1	464.9	498.6	538.3
40°	390.3	395.2	421.4	453.3	492.2
42.5°	350.5	356.4	380.7	411.0	446.0
45°	297.4	303.1	323.1	347.5	379.3
47.5°	251.7	258.3	273.6	294.7	321.7
50°	225.7	231.9	246.0	261.6	287.2
52.5°	202.8	209.0	221.6	233.6	255.5
55°	170.9	178.1	188.4	195.7	211.6
57.5°	144.9	151.7	159.9	163.1	172.8
60°	127.4	135.0	142.5	142.0	147.3
62.5°	111.5	118.0	125.3	120.2	120.6
65°	85.8	92.8	101.2	88.5	80.3
67.5°	69.3	70.7	79.4	61.7	52.1
70°	61.5	61.5	64.0	47.8	39.7
72.5°	54.2	54.2	51.9	38.9	30.3
75°	43.1	43.1	39.2	26.9	18.4
77.5°	33.2	32.9	30.0	20.1	13.4
80°	26.6	26.6	24.2	15.9	10.7
82.5°	20.8	20.8	18.8	12.4	7.8
85°	12.0	12.0	11.1	7.3	4.4
87.5°	4.3	4.3	3.9	2.3	1.9
90°	3.9	5.8	5.8	3.9	1.9
92.5°	9.7	29.2	27.2	11.7	9.7
95°	17.5	60.4	175.3	44.8	27.2
97.5°	27.2	68.1	350.5	159.7	85.7
100°	37.0	72.1	408.9	383.7	247.3
102.5°	48.6	77.9	407.0	539.4	444.0
105°	60.4	85.7	379.8	640.6	595.9



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	93.5	114.9	296.0	644.6	734.2
115°	105.1	126.6	282.4	595.9	703.0
117.5°	116.9	140.2	274.5	551.1	658.2
120°	126.6	151.9	268.7	508.3	613.4
122.5°	134.4	163.6	264.8	473.2	568.6
125°	142.2	175.3	262.9	444.0	529.7
127.5°	149.9	183.1	262.9	422.6	494.6
130°	157.8	186.9	261.0	401.2	465.4
132.5°	165.5	188.9	261.0	385.6	440.1
135°	171.3	192.7	261.0	370.0	418.7
137.5°	179.2	196.7	261.0	356.3	401.2
140°	185.0	202.5	261.0	342.8	381.7
142.5°	192.7	208.3	261.0	329.1	364.2
145°	200.6	214.3	259.0	319.4	346.6
147.5°	208.3	220.1	257.1	309.6	331.0
150°	214.3	225.9	257.1	299.9	317.5
152.5°	222.0	231.7	255.2	290.1	305.7
155°	227.8	235.7	255.2	284.3	294.0
157.5°	233.6	241.5	255.2	278.5	286.3
160°	239.6	245.4	257.1	274.5	280.4
162.5°	245.4	249.2	257.1	270.7	274.5
165°	249.2	251.2	257.1	268.7	270.7
167.5°	253.1	255.2	257.1	266.8	266.8
170°	255.2	257.1	259.0	264.8	264.8
172.5°	259.0	259.0	259.0	262.9	262.9
175°	261.0	261.0	259.0	262.9	261.0
177.5°	261.0	261.0	259.0	262.9	261.0
180°	261.0	261.0	261.0	261.0	261.0



Report Generated By 670246072 / DESKTOP-50001EG







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







107.5°	72.1	95.5	344.7	685.5	693.3
110°	81.8	105.1	317.5	679.6	736.1



(END OF REPORT)