

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: P844864

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

Issue Date: 8/14/2023

**Test Information**

Test Method: LM-79-08  
Report Number: P844864  
REPORT IS A COMBINATION OF REPORTS P700077 AND P700246  
Test Lab: INNOVATION CENTER  
Issue Date: 8/14/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: SQ4P-BB-100U-100D-B50-1D-UNV  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, 1000 LUMENS PER FOOT  
UPLIGHT, 1000 LUMENS PER FOOT DOWNLIGHT  
  
Light Source: -  
Ballast/Driver: -

**Summary**

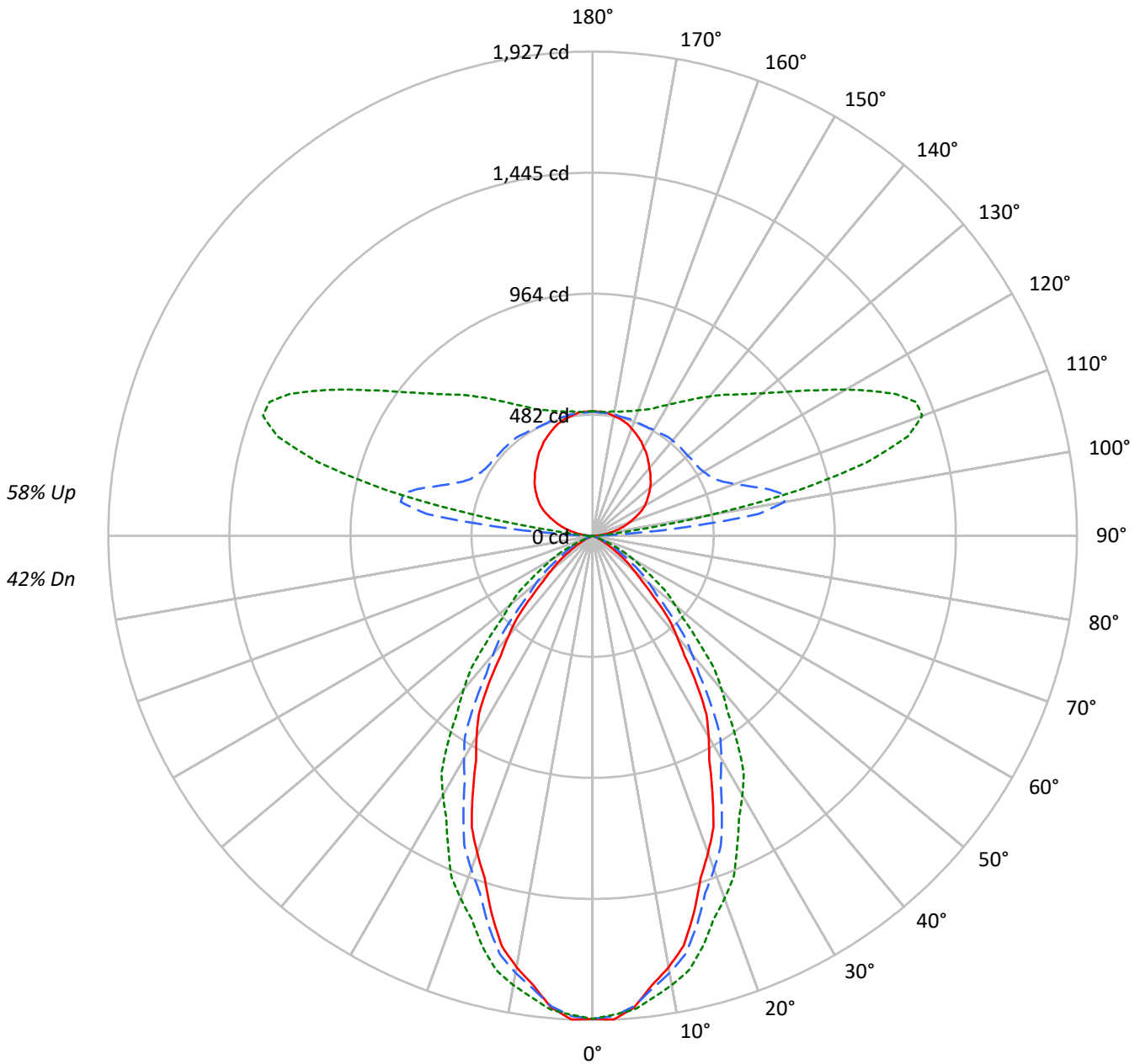
Lumens per Lamp: N/A  
Luminaire Lumens: 5505.9 lumens  
Efficiency: N/A  
Efficacy: 90.4 lumens/watt  
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97  
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')  
CIE Type: General Diffuse

Input Watts (W): 60.9  
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	105	105	105	105	96	96	96	96	79	79	79	63	63	63	48	48	48	42																			
1	97	94	90	87	89	86	83	81	71	69	68	58	56	55	45	44	44	38																			
2	90	84	78	74	82	77	72	69	64	61	58	52	50	49	42	40	39	34																			
3	83	75	69	63	76	69	64	59	58	54	51	48	45	43	38	37	35	31																			
4	77	67	60	55	70	62	56	52	53	48	45	44	41	38	35	33	32	28																			
5	71	61	54	48	65	56	50	45	48	43	40	40	37	34	33	30	29	26																			
6	66	55	48	43	60	51	45	40	44	39	36	37	33	31	30	28	26	23																			
7	61	50	43	38	56	47	41	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	20																			
9	54	42	36	31	49	40	34	29	34	30	26	29	26	23	24	22	20	18																			
10	50	39	33	28	46	37	31	27	32	27	24	27	24	21	23	21	19	17																			

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

	0°	45°	90°
0°	17738	17738	17738
5°	17452	17411	17539
10°	16329	16548	17010
15°	14846	15317	16170
20°	13179	13862	15076
25°	11475	12384	13852
30°	9831	10909	12694
35°	8149	9262	11292
40°	6262	7406	9622
45°	4528	5607	7743
50°	3083	4177	6142
55°	2004	3021	4773
60°	1151	2129	3451
65°	303	1301	1749
70°	154	402	502
75°	68	32	0
80°	48	0	0
85°	0	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	175.5	3.2
10°-20°	448.7	8.1
20°-30°	561.7	10.2
30°-40°	518.8	9.4
40°-50°	348.6	6.3
50°-60°	180.1	3.3
60°-70°	56.4	1.0
70°-80°	3.6	0.1
80°-90°	1.3	0.0
90°-100°	196.9	3.6
100°-110°	685.2	12.4
110°-120°	663.7	12.1
120°-130°	520.7	9.5
130°-140°	412.1	7.5
140°-150°	318.0	5.8
150°-160°	228.0	4.1
160°-170°	139.4	2.5
170°-180°	47.2	0.9
0°-30°	1185.9	21.5
0°-40°	1704.7	31.0
0°-60°	2233.4	40.6
0°-90°	2294.6	41.7
90°-120°	1545.9	28.1
90°-150°	2796.7	50.8
90°-180°	3211.0	58.3
0°-180°	5505.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1923	1923	1923	1923	1923	
5°	1884	1865	1880	1886	1894	175
15°	1554	1549	1604	1657	1693	433
25°	1127	1136	1216	1300	1361	517
35°	724	742	822	919	1003	448
45°	347	368	430	513	593	273
55°	125	146	188	241	297	116
65°	14	27	60	72	80	24
75°	2	2	1	0	0	3
85°	0	0	0	0	0	0
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°	1922.6	1922.6	1922.6	1922.6	1922.6
2.5°	1927.0	1908.9	1913.6	1913.6	1908.4
5°	1884.4	1865.3	1879.9	1886.3	1893.8
7.5°	1804.8	1789.9	1817.7	1838.4	1853.5
10°	1743.0	1730.3	1766.3	1794.6	1815.6
12.5°	1671.6	1661.7	1705.3	1744.2	1771.0
15°	1554.3	1548.8	1603.6	1657.3	1692.9
17.5°	1428.6	1428.3	1490.7	1557.6	1600.4
20°	1342.3	1344.9	1411.9	1485.6	1535.5
22.5°	1255.9	1262.2	1333.8	1410.7	1467.9
25°	1127.2	1136.2	1216.5	1299.9	1360.7
27.5°	1003.8	1017.1	1101.5	1187.8	1262.2
30°	922.8	938.1	1024.0	1115.0	1191.5
32.5°	842.9	861.5	945.1	1041.5	1119.2
35°	723.5	741.9	822.3	919.0	1002.6
37.5°	600.3	618.1	696.6	792.0	882.3
40°	519.9	539.9	614.9	707.2	798.9
42.5°	447.1	467.1	537.4	628.1	714.9
45°	347.0	367.9	429.7	513.4	593.4
47.5°	264.1	286.6	340.9	416.7	489.6
50°	214.8	237.5	291.0	357.8	427.9
52.5°	175.5	197.5	245.7	308.5	372.7
55°	124.6	145.5	187.8	241.3	296.7
57.5°	86.2	104.2	142.1	186.6	230.2
60°	62.4	79.6	115.4	151.4	187.0
62.5°	41.5	57.3	92.3	120.1	143.9
65°	13.9	26.8	59.6	71.8	80.1
67.5°	7.1	8.4	31.1	33.0	35.8
70°	5.7	5.7	14.9	15.8	18.6
72.5°	4.0	4.0	5.9	7.6	8.2
75°	1.9	1.9	0.9	0.0	0.0
77.5°	0.9	0.9	0.9	0.0	0.0
80°	0.9	0.9	0.0	0.0	0.0
82.5°	0.2	0.2	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°	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)