

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: P844881

Luminaire Tested: **SQ4P-BB-150U-050D-B40-1D-UNV**

Issue Date: 8/14/2023

**Test Information**

Test Method: LM-79-08  
Report Number: P844881  
REPORT IS A COMBINATION OF REPORTS P700131 AND P700248  
Test Lab: INNOVATION CENTER  
Issue Date: 8/14/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: SQ4P-BB-150U-050D-B40-1D-UNV  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, 1500 LUMENS PER FOOT  
UPLIGHT, 500 LUMENS PER FOOT DOWNLIGHT  
  
Light Source: -  
Ballast/Driver: -

**Summary**

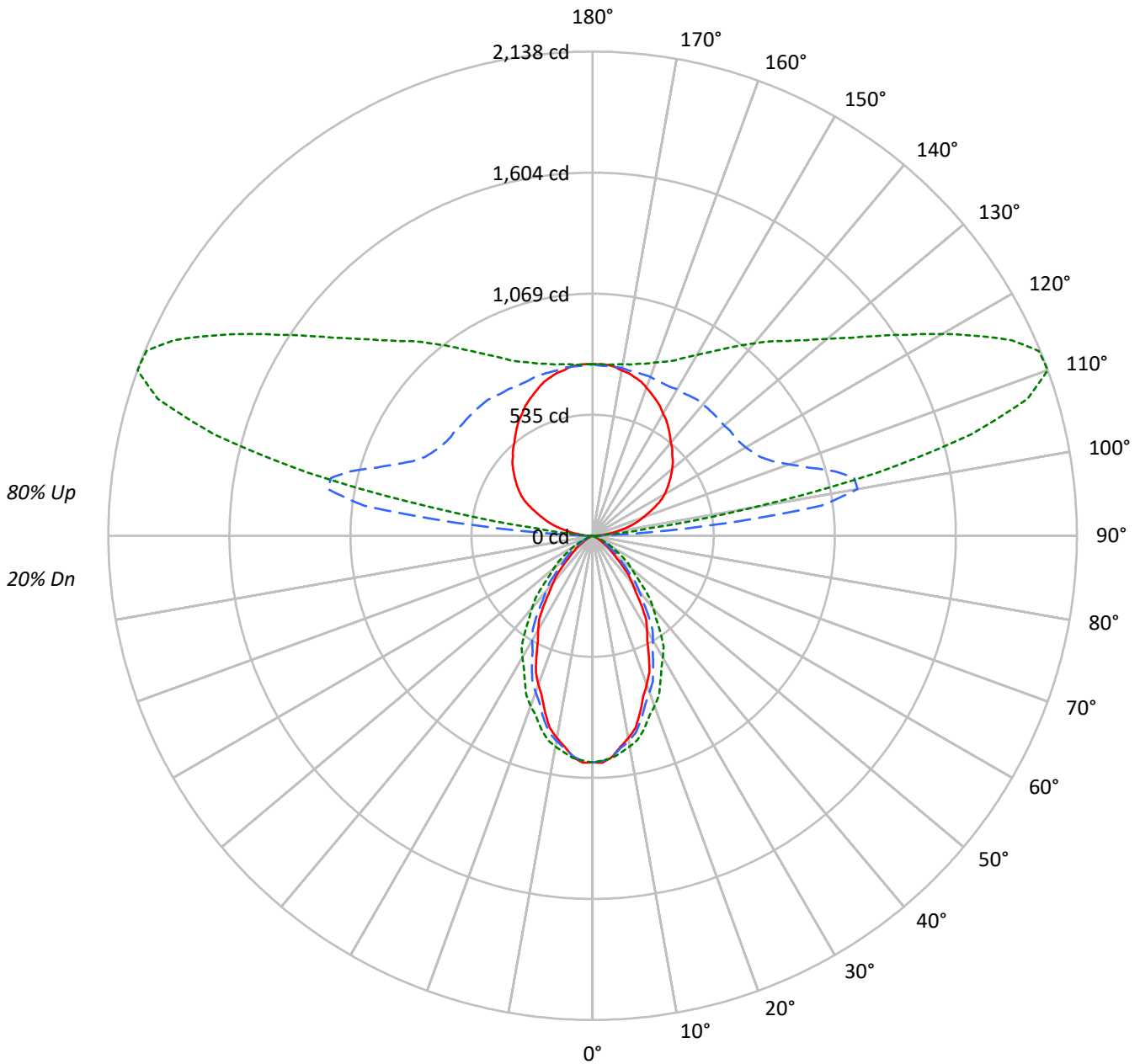
Lumens per Lamp: N/A  
Luminaire Lumens: 6114.4 lumens  
Efficiency: N/A  
Efficacy: 102.2 lumens/watt  
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97  
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')  
CIE Type: Semi-Indirect

Input Watts (W): 59.8  
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	100	100	100	100	88	88	88	88	66	66	66	46	46	46	28	28	28	20																			
1	92	88	84	81	81	78	75	72	59	57	56	42	41	40	26	25	25	18																			
2	84	77	72	67	74	69	64	61	53	50	47	38	36	34	24	23	22	16																			
3	77	69	62	57	68	61	56	51	47	43	40	34	32	30	22	21	20	15																			
4	71	61	54	49	62	55	49	44	42	38	35	31	28	26	20	19	18	13																			
5	65	55	47	42	57	49	43	38	38	34	30	28	25	23	18	17	16	12																			
6	60	49	42	37	53	44	38	33	34	30	27	25	23	20	17	15	14	11																			
7	56	44	37	32	49	40	34	29	31	27	24	23	20	18	15	14	13	10																			
8	52	40	33	28	46	36	30	26	29	24	21	21	18	16	14	13	12	9																			
9	48	37	30	25	43	33	27	23	26	22	19	20	17	15	13	12	11	9																			
10	45	34	27	23	40	30	25	21	24	20	17	18	15	14	13	11	10	8																			

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

	0°	45°	90°
0°	9234	9234	9234
5°	9085	9063	9130
10°	8500	8614	8854
15°	7728	7974	8418
20°	6860	7216	7849
25°	5974	6447	7212
30°	5118	5679	6607
35°	4243	4821	5878
40°	3260	3855	5009
45°	2356	2920	4030
50°	1605	2175	3198
55°	1044	1573	2485
60°	600	1109	1797
65°	159	677	910
70°	81	210	262
75°	36	18	0
80°	27	0	0
85°	0	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	91.3	1.5
10°-20°	233.6	3.8
20°-30°	292.4	4.8
30°-40°	270.1	4.4
40°-50°	181.5	3.0
50°-60°	93.8	1.5
60°-70°	29.4	0.5
70°-80°	1.9	0.0
80°-90°	1.9	0.0
90°-100°	301.6	4.9
100°-110°	1049.5	17.2
110°-120°	1016.6	16.6
120°-130°	797.5	13.0
130°-140°	631.2	10.3
140°-150°	487.1	8.0
150°-160°	349.2	5.7
160°-170°	213.6	3.5
170°-180°	72.2	1.2
0°-30°	617.3	10.1
0°-40°	887.4	14.5
0°-60°	1162.7	19.0
0°-90°	1195.8	19.6
90°-120°	2367.8	38.7
90°-150°	4283.6	70.1
90°-180°	4919.0	80.4
0°-180°	6114.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1001	1001	1001	1001	1001	
5°	981	971	979	982	986	91
15°	809	806	835	863	881	225
25°	587	592	633	677	708	269
35°	377	386	428	478	522	233
45°	181	192	224	267	309	142
55°	65	76	98	126	154	61
65°	7	14	31	37	42	12
75°	1	1	0	0	0	1
85°	0	0	0	0	0	0
90°	11	17	17	11	6	7
95°	51	175	509	130	79	54
105°	175	249	1103	1861	1731	184
115°	305	368	820	1731	2042	302
125°	413	509	764	1290	1538	370
135°	498	560	758	1075	1216	386
145°	583	622	752	928	1007	364
155°	662	684	741	826	854	305
165°	724	730	747	780	786	204
175°	758	758	752	764	758	72
180°	758	758	758	758	758	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1000.8	1000.8	1000.8	1000.8	1000.8
2.5°	1003.2	993.7	996.1	996.1	993.5
5°	981.0	971.0	978.6	982.0	985.8
7.5°	939.6	931.8	946.3	956.9	964.9
10°	907.3	900.7	919.5	934.2	945.1
12.5°	870.1	865.0	887.7	908.0	921.9
15°	809.1	806.3	834.8	862.8	881.3
17.5°	743.7	743.6	776.0	810.9	833.1
20°	698.7	700.1	735.0	773.4	799.4
22.5°	653.7	657.0	694.3	734.4	764.2
25°	586.8	591.5	633.3	676.7	708.4
27.5°	522.5	529.5	573.4	618.4	657.0
30°	480.4	488.4	533.1	580.5	620.2
32.5°	438.8	448.5	492.0	542.2	582.6
35°	376.7	386.2	428.0	478.4	521.9
37.5°	312.5	321.7	362.6	412.2	459.3
40°	270.7	281.0	320.1	368.1	415.9
42.5°	232.8	243.1	279.8	327.0	372.1
45°	180.6	191.5	223.8	267.3	308.9
47.5°	137.5	149.2	177.4	217.0	254.9
50°	111.8	123.7	151.5	186.3	222.8
52.5°	91.3	102.8	127.9	160.6	194.0
55°	64.9	75.8	97.8	125.6	154.5
57.5°	44.9	54.3	74.0	97.1	119.8
60°	32.5	41.5	60.1	78.8	97.4
62.5°	21.6	29.8	48.0	62.5	74.9
65°	7.3	14.0	31.0	37.4	41.7
67.5°	3.7	4.4	16.2	17.2	18.6
70°	3.0	3.0	7.8	8.2	9.7
72.5°	2.0	2.0	3.1	4.0	4.3
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°	11.3	17.0	17.0	11.3	5.6
92.5°	28.3	84.8	79.2	33.9	28.3
95°	50.9	175.3	509.0	130.0	79.2
97.5°	79.2	198.0	1018.1	463.8	248.9
100°	107.5	209.2	1187.8	1114.2	718.3
102.5°	141.4	226.3	1182.1	1566.7	1289.5
105°	175.3	248.9	1102.9	1860.8	1730.7



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	271.4	333.7	859.7	1872.1	2132.2
115°	305.4	367.7	820.1	1730.7	2041.8
117.5°	339.4	407.2	797.4	1600.6	1911.7
120°	367.7	441.1	780.5	1476.2	1781.6
122.5°	390.2	475.1	769.2	1374.4	1651.5
125°	412.9	509.0	763.5	1289.5	1538.4
127.5°	435.5	531.6	763.5	1227.3	1436.6
130°	458.2	543.0	757.9	1165.1	1351.7
132.5°	480.8	548.6	757.9	1119.8	1278.2
135°	497.7	559.9	757.9	1074.6	1216.0
137.5°	520.4	571.3	757.9	1035.1	1165.1
140°	537.3	588.2	757.9	995.4	1108.5
142.5°	559.9	605.2	757.9	955.9	1057.6
145°	582.6	622.1	752.2	927.6	1006.8
147.5°	605.2	639.1	746.6	899.3	961.5
150°	622.1	656.1	746.6	871.0	921.9
152.5°	644.8	673.0	740.9	842.7	888.0
155°	661.8	684.4	740.9	825.7	854.0
157.5°	678.7	701.3	740.9	808.8	831.5
160°	695.7	712.6	746.6	797.4	814.4
162.5°	712.6	724.0	746.6	786.2	797.4
165°	724.0	729.6	746.6	780.5	786.2
167.5°	735.2	740.9	746.6	774.9	774.9
170°	740.9	746.6	752.2	769.2	769.2
172.5°	752.2	752.2	752.2	763.5	763.5
175°	757.9	757.9	752.2	763.5	757.9
177.5°	757.9	757.9	752.2	763.5	757.9
180°	757.9	757.9	757.9	757.9	757.9



Report Generated By 670246072 / DESKTOP-50001EG







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







107.5°	209.2	277.2	1001.1	1990.8	2013.5
110°	237.5	305.4	921.9	1973.9	2137.9



(END OF REPORT)