

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: P845344

Luminaire Tested: **SQ4P-WB-075U-100D-B50-1D-UNV**

Issue Date: 8/14/2023

**Test Information**

Test Method: LM-79-08  
Report Number: P845344  
REPORT IS A COMBINATION OF REPORTS P700241 AND P700245  
Test Lab: INNOVATION CENTER  
Issue Date: 8/14/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: SQ4P-WB-075U-100D-B50-1D-UNV  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, 750 LUMENS PER FOOT  
UPLIGHT, 1000 LUMENS PER FOOT DOWNLIGHT  
  
Light Source: -  
Ballast/Driver: -

**Summary**

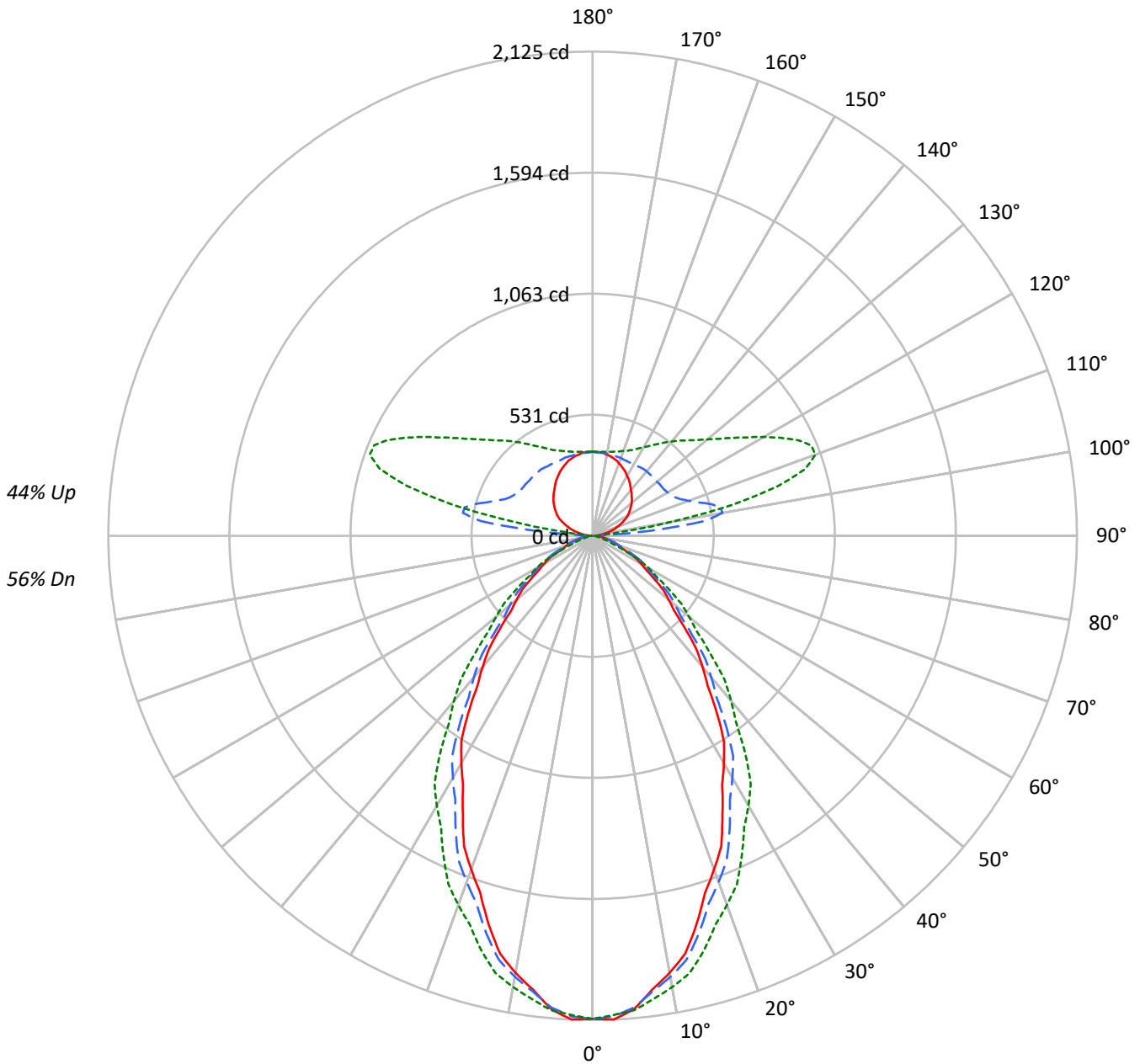
Lumens per Lamp: N/A  
Luminaire Lumens: 5483.9 lumens  
Efficiency: N/A  
Efficacy: 101.7 lumens/watt  
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02  
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')  
CIE Type: General Diffuse

Input Watts (W): 53.9  
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				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	109	109	109	109	101	101	101	101	87	87	87	74	74	74	62	62	62	56				56
1	100	97	93	90	93	90	87	85	78	76	74	67	65	64	57	56	55	50				50
2	93	86	80	76	86	80	76	72	70	66	63	60	58	56	52	50	48	44				44
3	85	77	70	65	79	72	66	61	63	59	55	55	51	49	47	45	43	39				39
4	79	69	62	56	73	65	58	53	57	52	48	50	46	43	43	40	38	35				35
5	73	62	55	49	68	59	52	47	52	47	43	45	41	38	39	36	34	31				31
6	68	56	49	44	63	53	47	42	47	42	38	42	37	34	36	33	31	28				28
7	63	52	44	39	59	49	42	37	43	38	34	38	34	31	34	30	28	26				26
8	59	47	40	35	55	45	38	34	40	35	31	35	31	28	31	28	26	23				23
9	55	44	36	32	52	41	35	30	37	32	28	33	29	26	29	26	23	21				21
10	52	40	33	29	48	38	32	28	34	29	26	31	27	24	27	24	22	20				20

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

	0°	45°	90°
0°	19560	19560	19560
5°	19317	19247	19360
10°	18249	18415	18842
15°	16846	17239	18012
20°	15299	15873	16924
25°	13723	14471	15768
30°	12271	13071	14568
35°	10728	11503	13151
40°	9029	9747	11384
45°	7452	8095	9504
50°	6221	6783	7916
55°	5282	5820	6537
60°	4515	5047	5218
65°	3596	4244	3369
70°	3186	3313	2058
75°	2948	2688	1262
80°	2720	2476	1089
85°	2445	2276	889



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	194.5	3.5
10°-20°	505.8	9.2
20°-30°	655.2	11.9
30°-40°	641.6	11.7
40°-50°	491.1	9.0
50°-60°	327.2	6.0
60°-70°	178.6	3.3
70°-80°	74.4	1.4
80°-90°	22.0	0.4
90°-100°	146.8	2.7
100°-110°	510.8	9.3
110°-120°	494.8	9.0
120°-130°	388.1	7.1
130°-140°	307.2	5.6
140°-150°	237.1	4.3
150°-160°	169.9	3.1
160°-170°	103.9	1.9
170°-180°	35.2	0.6
0°-30°	1355.4	24.7
0°-40°	1997.0	36.4
0°-60°	2815.3	51.3
0°-90°	3090.2	56.4
90°-120°	1152.3	21.0
90°-150°	2084.7	38.0
90°-180°	2394.0	43.7
0°-180°	5483.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2120	2120	2120	2120	2120	
5°	2086	2065	2078	2083	2090	194
15°	1764	1757	1805	1854	1886	493
25°	1348	1352	1422	1483	1549	620
35°	952	957	1021	1090	1168	592
45°	571	582	620	667	728	445
55°	328	342	362	376	406	298
65°	165	178	194	170	154	171
75°	83	83	75	52	35	88
85°	23	23	22	14	8	25
90°	6	8	8	6	3	5
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°	2120.1	2120.1	2120.1	2120.1	2120.1
2.5°	2125.3	2106.4	2111.2	2111.0	2105.1
5°	2085.7	2064.7	2078.2	2082.9	2090.4
7.5°	2008.2	1992.4	2017.1	2035.1	2049.9
10°	1947.9	1934.3	1965.6	1992.2	2011.2
12.5°	1878.1	1866.4	1905.5	1940.8	1965.9
15°	1763.7	1757.4	1804.8	1853.9	1885.7
17.5°	1641.6	1638.4	1692.7	1750.0	1790.7
20°	1558.2	1557.3	1616.7	1676.5	1723.7
22.5°	1474.1	1476.0	1538.6	1600.7	1654.6
25°	1348.0	1351.6	1421.5	1483.4	1548.9
27.5°	1231.3	1233.1	1305.0	1370.5	1440.4
30°	1151.8	1156.1	1226.9	1294.8	1367.4
32.5°	1072.2	1077.4	1146.7	1216.6	1290.8
35°	952.5	957.2	1021.3	1090.3	1167.6
37.5°	829.3	835.6	892.7	957.5	1033.8
40°	749.7	759.0	809.3	870.6	945.2
42.5°	673.1	684.4	731.2	789.3	856.4
45°	571.1	582.1	620.4	667.4	728.4
47.5°	483.3	495.9	525.4	565.9	617.9
50°	433.4	445.4	472.6	502.5	551.5
52.5°	389.6	401.4	425.7	448.8	490.7
55°	328.4	342.0	361.8	375.7	406.4
57.5°	278.2	291.2	307.0	313.1	331.9
60°	244.7	259.2	273.5	272.8	282.8
62.5°	214.2	226.6	240.7	230.8	231.4
65°	164.7	178.4	194.4	169.9	154.3
67.5°	133.1	135.9	152.5	118.5	100.1
70°	118.1	118.1	122.8	91.8	76.3
72.5°	104.1	104.1	99.9	74.5	58.4
75°	82.7	82.7	75.4	51.8	35.4
77.5°	63.8	63.2	57.7	38.6	25.7
80°	51.2	51.2	46.6	30.6	20.5
82.5°	40.0	40.0	36.0	23.8	15.1
85°	23.1	23.1	21.5	13.9	8.4
87.5°	8.2	8.2	7.3	4.4	3.8
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)