

Scaled data based on original data using  
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-  
State Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: CORELITE

Report Number: P518710

Luminaire Tested: **SQ4-BB-100U-075D-830-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P518710  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-23, G2-2009-966-12)  
Test Lab: INNOVATION CENTER  
Issue Date: 4/29/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: SQ4-BB-100U-075D-830-1D-UNV-STD-W-8  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE  
DOWNLIGHT 750 LUMENS PER FOOT  
UPLIGHT 1000 LUMENS PER FOOT  
Light Source: 3000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

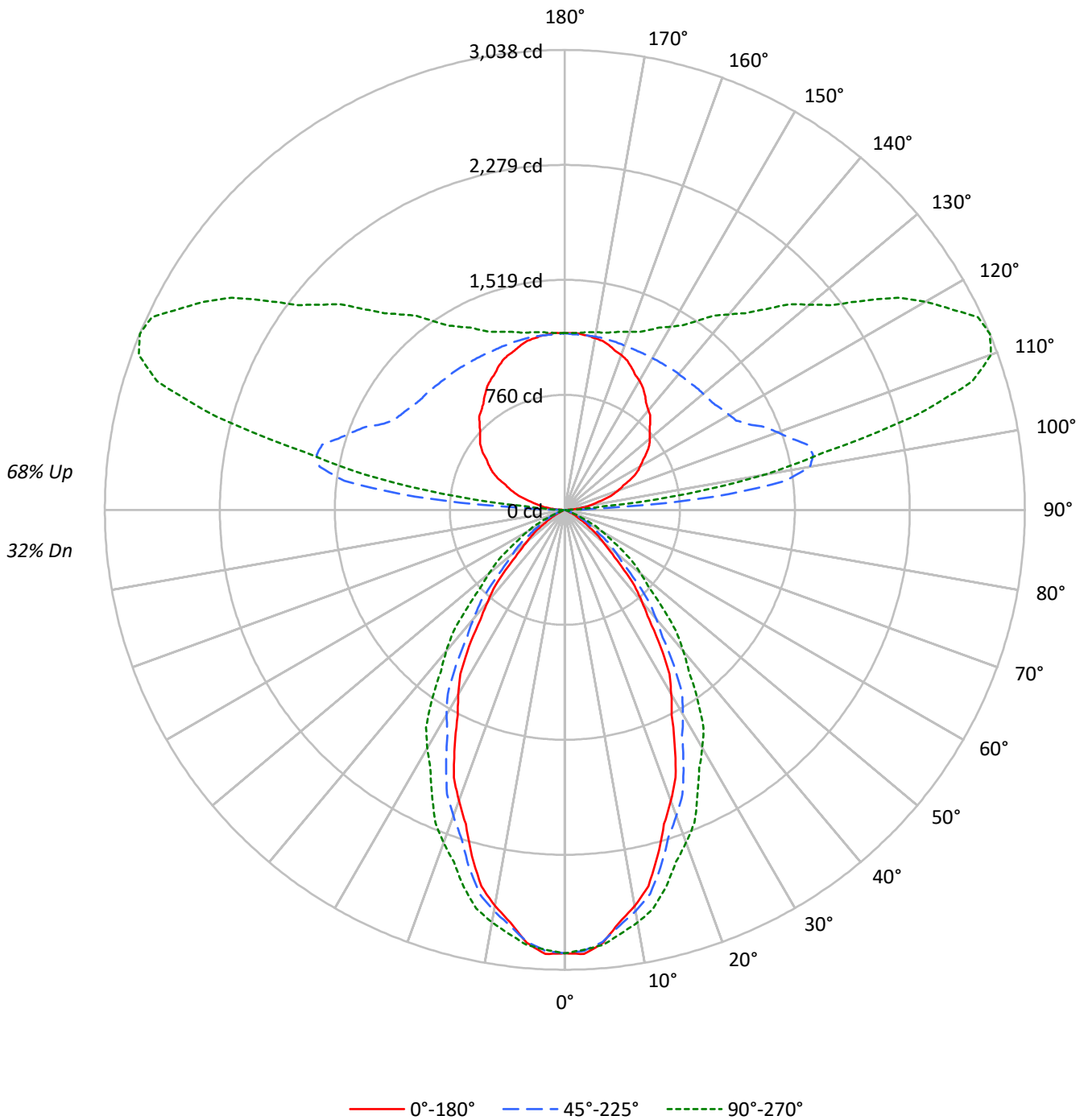
Lumens per Lamp: N/A  
Luminaire Lumens: 11078.9 lumens  
Efficiency: N/A  
Efficacy: 106.6 lumens/watt  
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97  
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')  
CIE Type: Semi-Indirect

Input Watts (W): 103.9  
Input Voltage (V): 120  
Input Current (Ain): 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: 24 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	
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	0
RCR																		
0	103	103	103	103	92	92	92	92	73	73	73	55	55	55	39	39	39	32
1	95	91	88	85	85	82	79	77	66	64	62	50	49	48	36	36	35	29
2	87	81	75	71	78	73	69	65	59	56	53	46	44	42	33	32	31	26
3	80	72	66	60	72	65	60	56	53	49	46	41	39	37	31	29	28	23
4	74	64	57	52	67	59	53	48	48	44	40	38	35	33	28	27	25	21
5	68	58	51	45	62	53	47	42	43	39	36	34	31	29	26	24	23	19
6	63	52	45	40	57	48	42	37	39	35	32	31	28	26	24	22	21	18
7	59	48	40	35	53	44	37	33	36	32	28	29	26	24	22	20	19	16
8	55	43	36	32	49	40	34	30	33	29	25	27	24	21	21	19	17	15
9	51	40	33	28	46	37	31	27	31	26	23	25	22	19	19	17	16	14
10	48	37	30	26	43	34	28	24	28	24	21	23	20	18	18	16	15	13

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

	0°	45°	90°
0°	13514	13514	13514
5°	13297	13264	13362
10°	12441	12607	12959
15°	11310	11669	12319
20°	10040	10562	11487
25°	8743	9436	10554
30°	7489	8312	9671
35°	6209	7056	8604
40°	4771	5641	7331
45°	3449	4272	5899
50°	2350	3184	4678
55°	1527	2303	3636
60°	876	1621	2629
65°	233	990	1331
70°	115	306	382
75°	50	25	0
80°	37	0	0
85°	0	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	267.3	2.4
10°-20°	683.7	6.2
20°-30°	855.9	7.7
30°-40°	790.6	7.1
40°-50°	531.2	4.8
50°-60°	274.4	2.5
60°-70°	85.9	0.8
70°-80°	5.4	0.0
80°-90°	2.5	0.0
90°-100°	546.5	4.9
100°-110°	1508.6	13.6
110°-120°	1555.9	14.0
120°-130°	1250.3	11.3
130°-140°	982.6	8.9
140°-150°	753.6	6.8
150°-160°	541.6	4.9
160°-170°	331.2	3.0
170°-180°	111.7	1.0
0°-30°	1806.9	16.3
0°-40°	2597.5	23.4
0°-60°	3403.1	30.7
0°-90°	3497.0	31.6
90°-120°	3611.0	32.6
90°-150°	6597.5	59.5
90°-180°	7582.0	68.4
0°-180°	11078.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2930	2930	2930	2930	2930	
5°	2871	2842	2864	2874	2886	266
15°	2368	2360	2443	2525	2579	660
25°	1718	1732	1854	1981	2073	788
35°	1103	1130	1253	1400	1528	683
45°	529	560	655	782	904	415
55°	190	222	286	368	452	177
65°	21	41	91	109	122	36
75°	3	3	1	0	0	4
85°	0	0	0	0	0	0
90°	4	7	15	17	19	6
95°	80	296	991	408	265	86
105°	269	415	1660	2534	2386	286
115°	482	582	1337	2646	3010	473
125°	661	752	1212	2051	2407	588
135°	795	881	1178	1661	1873	615
145°	922	986	1163	1414	1522	577
155°	1040	1075	1154	1269	1309	479
165°	1126	1140	1159	1204	1214	317
175°	1167	1169	1161	1178	1174	111
180°	1167	1167	1167	1167	1167	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2929.5	2929.5	2929.5	2929.5	2929.5
2.5°	2936.3	2908.6	2915.9	2915.7	2907.9
5°	2871.4	2842.3	2864.3	2874.5	2885.5
7.5°	2750.0	2727.3	2769.6	2801.3	2824.3
10°	2655.9	2636.5	2691.4	2734.6	2766.5
12.5°	2547.1	2532.1	2598.4	2657.7	2698.5
15°	2368.2	2359.9	2443.4	2525.4	2579.4
17.5°	2176.6	2176.3	2271.6	2373.4	2438.5
20°	2045.1	2049.3	2151.4	2263.7	2339.9
22.5°	1913.6	1923.3	2032.3	2149.4	2236.7
25°	1717.7	1731.6	1853.8	1980.6	2073.4
27.5°	1529.5	1549.7	1678.3	1810.1	1923.2
30°	1405.9	1429.5	1560.4	1699.1	1815.5
32.5°	1284.6	1312.6	1440.2	1586.9	1705.5
35°	1102.6	1130.3	1252.9	1400.3	1527.8
37.5°	914.7	941.9	1061.5	1206.7	1344.4
40°	792.2	822.7	936.8	1077.5	1217.4
42.5°	681.1	711.6	818.9	957.1	1089.3
45°	528.6	560.5	654.8	782.3	904.2
47.5°	402.2	436.9	519.6	634.9	746.0
50°	327.4	362.0	443.6	545.2	651.9
52.5°	267.3	300.8	374.4	470.2	568.0
55°	189.9	221.8	286.3	367.6	452.1
57.5°	131.2	158.7	216.6	284.4	350.6
60°	95.0	121.3	175.7	230.8	284.9
62.5°	63.2	87.3	140.6	182.8	219.1
65°	21.3	40.7	90.7	109.4	121.9
67.5°	10.8	13.0	47.6	50.3	54.4
70°	8.5	8.5	22.7	24.2	28.3
72.5°	6.2	6.2	9.1	11.6	12.5
75°	2.8	2.8	1.4	0.0	0.0
77.5°	1.4	1.4	1.1	0.0	0.0
80°	1.4	1.4	0.0	0.0	0.0
82.5°	0.3	0.3	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.7	1.5	3.0	3.4	3.7
90°	3.7	7.4	14.9	16.8	18.7
92.5°	33.6	139.5	249.4	91.0	70.9
95°	80.3	295.7	991.4	407.5	265.1
97.5°	132.9	331.2	1468.6	1130.7	818.9
100°	171.8	352.5	1644.9	1656.5	1346.1
102.5°	209.1	376.7	1679.2	2046.7	1752.4
105°	268.9	414.9	1659.8	2534.0	2386.1
107.5°	332.3	462.3	1567.2	2768.9	2823.0
110°	377.1	494.0	1495.5	2819.5	2994.7



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	417.5	529.9	1428.3	2779.6	3038.1
115°	481.7	582.1	1336.8	2646.4	3009.7
117.5°	537.7	637.8	1276.7	2459.0	2872.3
120°	575.1	673.6	1252.8	2332.1	2748.3
122.5°	610.9	705.1	1233.4	2213.6	2607.9
125°	660.9	752.2	1211.7	2050.6	2406.6
127.5°	703.5	794.8	1199.0	1912.9	2219.9
130°	731.9	823.2	1193.0	1828.6	2107.9
132.5°	758.8	845.7	1187.1	1757.8	2010.8
135°	795.4	881.2	1178.1	1660.9	1872.7
137.5°	836.4	914.6	1173.6	1579.5	1760.3
140°	858.8	935.5	1170.6	1525.3	1684.1
142.5°	884.2	955.1	1167.7	1477.0	1616.9
145°	922.3	986.2	1163.2	1413.9	1521.6
147.5°	958.9	1014.8	1159.1	1360.7	1444.3
150°	985.8	1031.4	1157.6	1329.0	1396.6
152.5°	1006.7	1049.4	1156.1	1301.9	1357.7
155°	1039.9	1074.6	1153.8	1268.6	1308.8
157.5°	1070.6	1097.2	1154.2	1244.5	1271.8
160°	1088.5	1112.2	1155.7	1230.8	1250.9
162.5°	1103.4	1124.2	1157.2	1218.8	1234.5
165°	1125.8	1140.4	1159.4	1204.5	1213.6
167.5°	1143.0	1151.8	1161.3	1195.7	1198.6
170°	1152.0	1159.3	1161.3	1191.2	1191.2
172.5°	1159.4	1163.8	1161.3	1185.2	1183.7
175°	1166.9	1168.7	1161.3	1178.0	1174.4
177.5°	1169.9	1168.4	1160.9	1171.3	1168.4
180°	1166.9	1166.9	1166.9	1166.9	1166.9

(END OF REPORT)