

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: P518722

Luminaire Tested: **SQ4-BB-100U-075D-930-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P518722  
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-930-1D-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, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

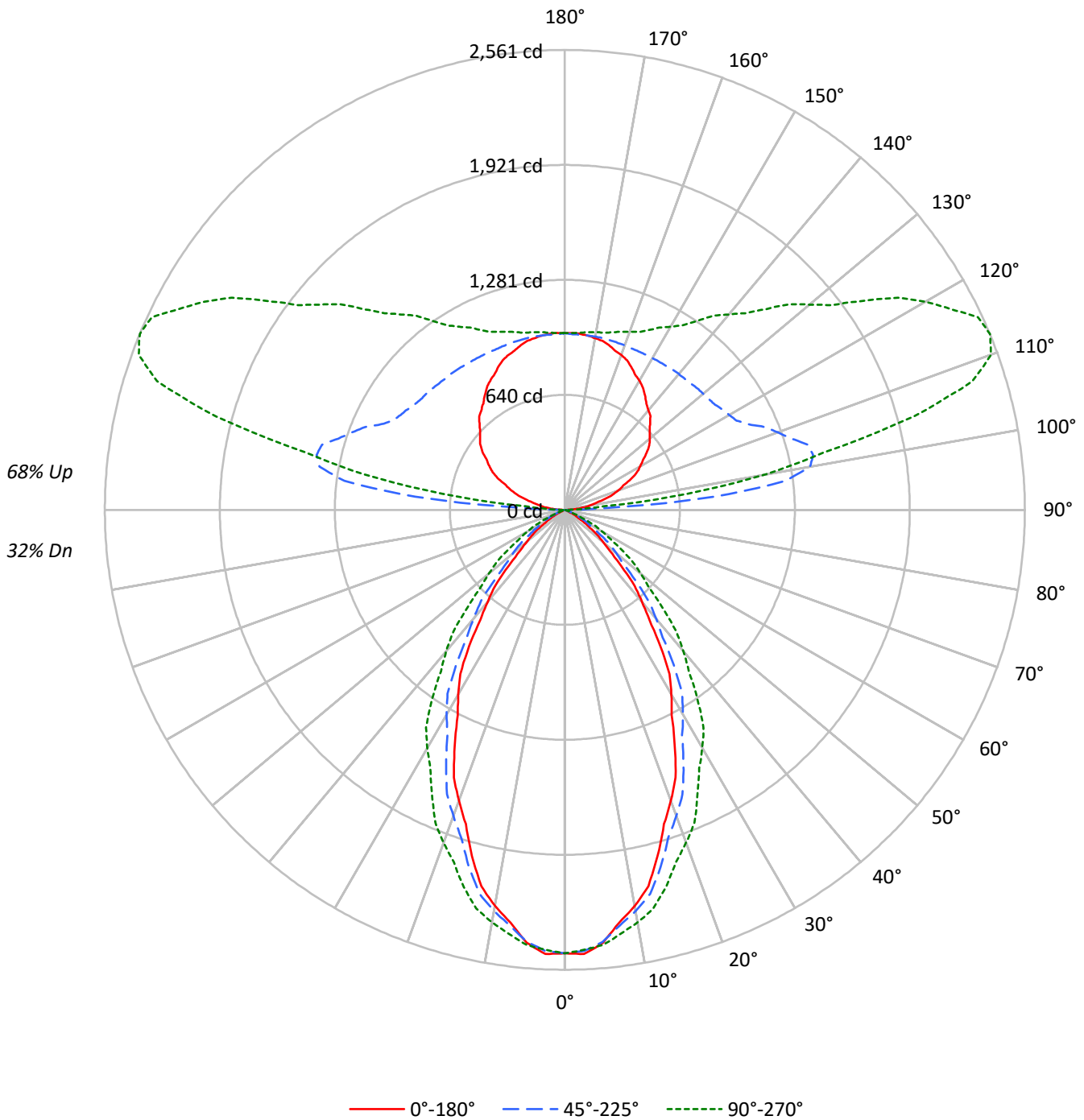
Lumens per Lamp: N/A  
Luminaire Lumens: 9340.2 lumens  
Efficiency: N/A  
Efficacy: 89.9 lumens/watt  
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97  
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')  
CIE Type: Semi-Indirect

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°	11393	11393	11393
5°	11210	11182	11265
10°	10489	10629	10925
15°	9535	9838	10386
20°	8464	8904	9684
25°	7371	7955	8897
30°	6314	7007	8153
35°	5235	5948	7253
40°	4022	4756	6181
45°	2908	3601	4973
50°	1981	2684	3944
55°	1288	1942	3066
60°	739	1367	2216
65°	195	835	1122
70°	97	258	322
75°	43	21	0
80°	32	0	0
85°	0	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	225.4	2.4
10°-20°	576.4	6.2
20°-30°	721.6	7.7
30°-40°	666.5	7.1
40°-50°	447.9	4.8
50°-60°	231.3	2.5
60°-70°	72.5	0.8
70°-80°	4.6	0.0
80°-90°	2.1	0.0
90°-100°	460.7	4.9
100°-110°	1271.9	13.6
110°-120°	1311.7	14.0
120°-130°	1054.1	11.3
130°-140°	828.4	8.9
140°-150°	635.3	6.8
150°-160°	456.6	4.9
160°-170°	279.2	3.0
170°-180°	94.1	1.0
0°-30°	1523.4	16.3
0°-40°	2189.9	23.4
0°-60°	2869.0	30.7
0°-90°	2948.2	31.6
90°-120°	3044.3	32.6
90°-150°	5562.0	59.5
90°-180°	6392.0	68.4
0°-180°	9340.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2470	2470	2470	2470	2470	
5°	2421	2396	2415	2423	2433	224
15°	1997	1990	2060	2129	2175	556
25°	1448	1460	1563	1670	1748	664
35°	930	953	1056	1180	1288	576
45°	446	472	552	660	762	350
55°	160	187	241	310	381	149
65°	18	34	76	92	103	30
75°	2	2	1	0	0	3
85°	0	0	0	0	0	0
90°	3	6	13	14	16	5
95°	68	249	836	344	224	72
105°	227	350	1399	2136	2012	241
115°	406	491	1127	2231	2537	399
125°	557	634	1022	1729	2029	496
135°	670	743	993	1400	1579	519
145°	778	831	981	1192	1283	487
155°	877	906	973	1070	1103	404
165°	949	962	978	1015	1023	268
175°	984	985	979	993	990	93
180°	984	984	984	984	984	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2469.7	2469.7	2469.7	2469.7	2469.7
2.5°	2475.4	2452.1	2458.2	2458.1	2451.6
5°	2420.7	2396.2	2414.7	2423.3	2432.7
7.5°	2318.4	2299.3	2334.9	2361.7	2381.1
10°	2239.1	2222.8	2269.0	2305.4	2332.3
12.5°	2147.3	2134.7	2190.6	2240.6	2275.0
15°	1996.6	1989.5	2059.9	2129.0	2174.6
17.5°	1835.0	1834.8	1915.1	2000.9	2055.8
20°	1724.1	1727.6	1813.8	1908.4	1972.7
22.5°	1613.3	1621.4	1713.4	1812.1	1885.7
25°	1448.1	1459.8	1562.8	1669.8	1748.0
27.5°	1289.5	1306.5	1414.9	1526.1	1621.4
30°	1185.3	1205.1	1315.5	1432.4	1530.6
32.5°	1083.0	1106.6	1214.2	1337.9	1437.9
35°	929.6	952.9	1056.2	1180.5	1288.0
37.5°	771.1	794.0	894.9	1017.3	1133.4
40°	667.9	693.6	789.8	908.4	1026.4
42.5°	574.2	599.9	690.4	806.9	918.3
45°	445.7	472.5	552.0	659.5	762.3
47.5°	339.1	368.3	438.0	535.3	629.0
50°	276.0	305.2	374.0	459.7	549.6
52.5°	225.3	253.6	315.7	396.4	478.9
55°	160.1	187.0	241.4	309.9	381.2
57.5°	110.6	133.8	182.6	239.8	295.6
60°	80.1	102.3	148.2	194.6	240.2
62.5°	53.3	73.6	118.5	154.1	184.7
65°	17.9	34.3	76.5	92.2	102.8
67.5°	9.1	10.9	40.1	42.4	45.9
70°	7.2	7.2	19.1	20.4	23.9
72.5°	5.3	5.3	7.6	9.8	10.5
75°	2.4	2.4	1.2	0.0	0.0
77.5°	1.2	1.2	1.0	0.0	0.0
80°	1.2	1.2	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°	0.6	1.2	2.5	2.8	3.1
90°	3.1	6.2	12.6	14.2	15.7
92.5°	28.3	117.6	210.3	76.7	59.8
95°	67.7	249.3	835.8	343.6	223.5
97.5°	112.1	279.2	1238.1	953.2	690.4
100°	144.8	297.2	1386.7	1396.5	1134.9
102.5°	176.3	317.6	1415.7	1725.5	1477.4
105°	226.7	349.8	1399.3	2136.3	2011.6
107.5°	280.2	389.8	1321.2	2334.4	2379.9
110°	318.0	416.5	1260.8	2377.0	2524.7



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	352.0	446.8	1204.1	2343.3	2561.3
115°	406.1	490.7	1127.0	2231.1	2537.3
117.5°	453.3	537.7	1076.3	2073.0	2421.5
120°	484.8	567.9	1056.2	1966.1	2317.0
122.5°	515.0	594.4	1039.8	1866.2	2198.6
125°	557.2	634.2	1021.5	1728.8	2028.9
127.5°	593.1	670.0	1010.8	1612.7	1871.5
130°	617.0	694.0	1005.8	1541.6	1777.1
132.5°	639.7	712.9	1000.8	1481.9	1695.2
135°	670.5	742.9	993.2	1400.2	1578.8
137.5°	705.2	771.0	989.4	1331.6	1484.0
140°	724.1	788.7	986.9	1285.9	1419.8
142.5°	745.5	805.2	984.4	1245.2	1363.1
145°	777.6	831.4	980.6	1192.0	1282.8
147.5°	808.4	855.5	977.2	1147.2	1217.7
150°	831.1	869.6	975.9	1120.4	1177.4
152.5°	848.7	884.7	974.6	1097.5	1144.6
155°	876.7	906.0	972.7	1069.5	1103.4
157.5°	902.5	925.0	973.1	1049.1	1072.2
160°	917.7	937.7	974.3	1037.7	1054.6
162.5°	930.3	947.8	975.6	1027.5	1040.7
165°	949.1	961.5	977.5	1015.4	1023.1
167.5°	963.6	971.0	979.0	1008.1	1010.5
170°	971.2	977.3	979.0	1004.2	1004.2
172.5°	977.5	981.2	979.0	999.2	997.9
175°	983.8	985.3	979.0	993.1	990.1
177.5°	986.3	985.1	978.7	987.5	985.0
180°	983.8	983.8	983.8	983.8	983.8

(END OF REPORT)