

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: P518511

Luminaire Tested: **SQ4-BB-075U-050D-940-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P518511  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-22, 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-075U-050D-940-1D-UNV-STD-W-12  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE  
DOWNLIGHT 500 LUMENS PER FOOT  
UPLIGHT 750 LUMENS PER FOOT  
Light Source: 4000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

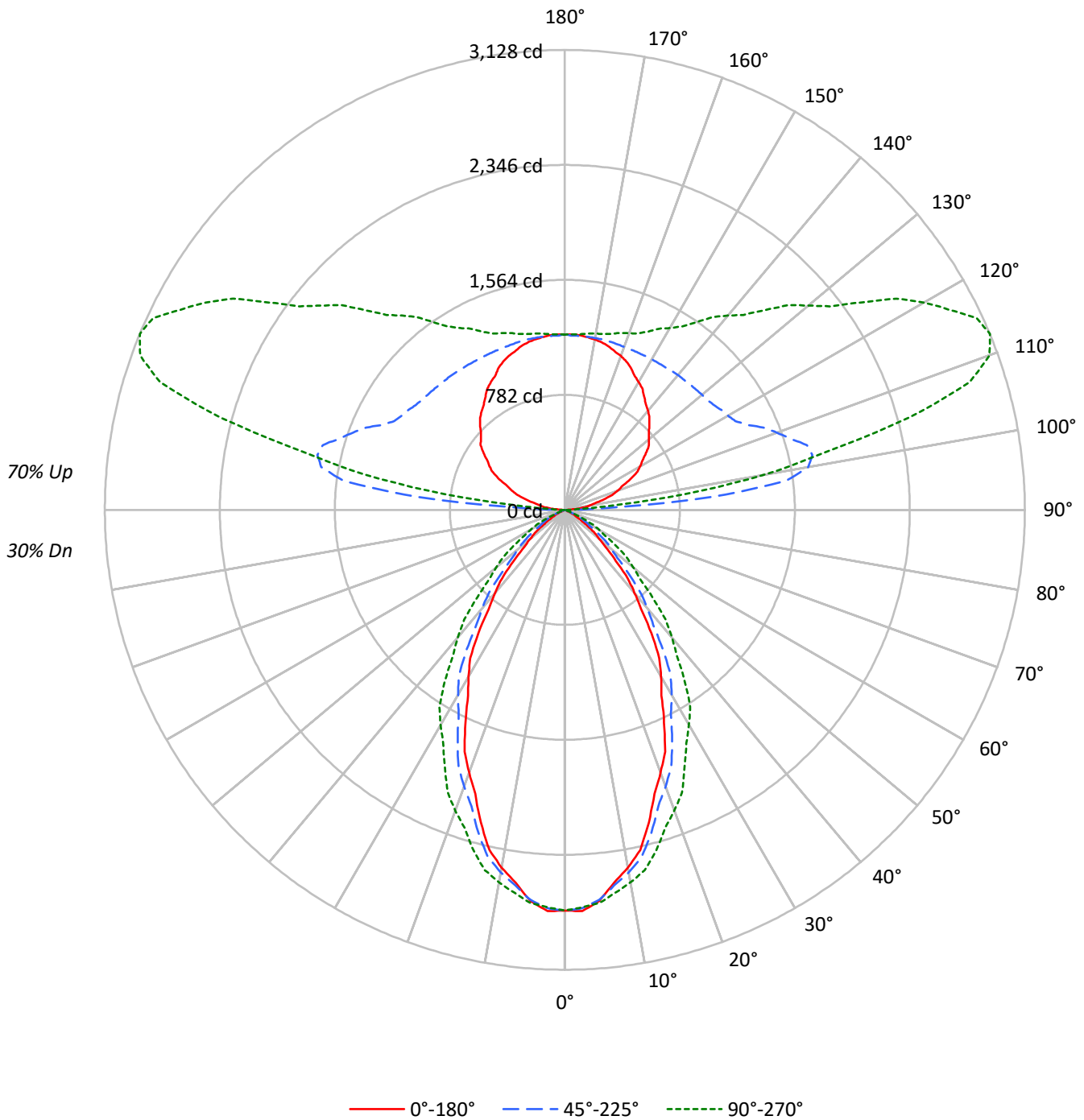
Lumens per Lamp: N/A  
Luminaire Lumens: 11017.9 lumens  
Efficiency: N/A  
Efficacy: 102.6 lumens/watt  
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97  
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')  
CIE Type: Semi-Indirect

Input Watts (W): 107.4  
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	50	30	10	0	
RCR																						
0	102	102	102	102	92	92	92	92	72	72	72	54	54	54	37	37	37	30				
1	94	90	87	84	84	81	79	76	64	63	61	49	48	47	35	34	33	27				
2	87	80	75	70	78	72	68	64	58	55	52	44	42	41	32	31	30	24				
3	80	71	65	60	72	65	59	55	52	48	45	40	38	36	29	28	27	22				
4	73	64	57	52	66	58	52	47	47	43	39	36	34	32	27	25	24	20				
5	68	57	50	45	61	52	46	41	42	38	35	33	30	28	25	23	22	18				
6	63	52	45	39	56	47	41	36	39	34	31	30	27	25	23	21	20	16				
7	58	47	40	35	52	43	37	32	35	31	27	28	25	23	21	19	18	15				
8	54	43	36	31	49	39	33	29	32	28	25	26	23	21	20	18	16	14				
9	51	39	33	28	46	36	30	26	30	25	22	24	21	19	18	16	15	13				
10	47	36	30	25	43	33	27	24	28	23	20	22	19	17	17	15	14	12				

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

	0°	45°	90°
0°	8380	8380	8380
5°	8246	8225	8287
10°	7715	7818	8036
15°	7014	7236	7639
20°	6226	6550	7124
25°	5422	5851	6545
30°	4644	5155	5997
35°	3851	4375	5336
40°	2959	3498	4547
45°	2139	2649	3658
50°	1457	1974	2901
55°	947	1428	2255
60°	543	1006	1630
65°	144	614	825
70°	71	190	237
75°	31	15	0
80°	23	0	0
85°	0	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	248.7	2.3
10°-20°	636.0	5.8
20°-30°	796.2	7.2
30°-40°	735.4	6.7
40°-50°	494.2	4.5
50°-60°	255.2	2.3
60°-70°	79.9	0.7
70°-80°	5.0	0.0
80°-90°	3.1	0.0
90°-100°	562.1	5.1
100°-110°	1546.5	14.0
110°-120°	1596.3	14.5
120°-130°	1279.0	11.6
130°-140°	1004.5	9.1
140°-150°	769.8	7.0
150°-160°	553.5	5.0
160°-170°	338.4	3.1
170°-180°	114.1	1.0
0°-30°	1680.8	15.3
0°-40°	2416.2	21.9
0°-60°	3165.6	28.7
0°-90°	3253.8	29.5
90°-120°	3704.9	33.6
90°-150°	6758.2	61.3
90°-180°	7764.0	70.5
0°-180°	11017.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2725	2725	2725	2725	2725	
5°	2671	2644	2664	2674	2684	248
15°	2203	2195	2273	2349	2399	614
25°	1598	1611	1724	1842	1929	733
35°	1026	1052	1165	1303	1421	635
45°	492	521	609	728	841	386
55°	177	206	266	342	421	165
65°	20	38	84	102	113	33
75°	3	3	1	0	0	4
85°	0	0	0	0	0	0
90°	2	10	18	23	23	6
95°	84	307	994	425	271	88
105°	276	425	1704	2595	2422	291
115°	489	596	1367	2722	3089	483
125°	674	769	1240	2098	2457	602
135°	814	903	1204	1696	1920	628
145°	941	1005	1187	1445	1557	590
155°	1065	1100	1179	1299	1336	489
165°	1151	1166	1184	1233	1240	324
175°	1192	1194	1187	1202	1199	113
180°	1192	1192	1192	1192	1192	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2725.0	2725.0	2725.0	2725.0	2725.0
2.5°	2731.4	2705.6	2712.4	2712.2	2705.0
5°	2671.0	2643.9	2664.4	2673.8	2684.2
7.5°	2558.1	2537.0	2576.3	2605.8	2627.2
10°	2470.6	2452.5	2503.5	2543.8	2573.4
12.5°	2369.3	2355.4	2417.1	2472.2	2510.1
15°	2203.0	2195.2	2272.8	2349.1	2399.4
17.5°	2024.7	2024.5	2113.0	2207.8	2268.3
20°	1902.4	1906.2	2001.3	2105.7	2176.6
22.5°	1780.0	1789.1	1890.5	1999.4	2080.6
25°	1597.8	1610.7	1724.4	1842.4	1928.7
27.5°	1422.8	1441.6	1561.2	1683.8	1789.0
30°	1307.8	1329.7	1451.5	1580.5	1688.8
32.5°	1195.0	1221.0	1339.7	1476.2	1586.5
35°	1025.7	1051.5	1165.4	1302.6	1421.2
37.5°	850.9	876.1	987.4	1122.5	1250.6
40°	737.0	765.3	871.4	1002.3	1132.5
42.5°	633.6	662.0	761.7	890.3	1013.3
45°	491.7	521.4	609.1	727.7	841.1
47.5°	374.1	406.4	483.3	590.6	694.0
50°	304.5	336.8	412.6	507.2	606.4
52.5°	248.6	279.8	348.3	437.4	528.4
55°	176.7	206.3	266.3	341.9	420.6
57.5°	122.1	147.6	201.4	264.5	326.2
60°	88.3	112.8	163.5	214.7	265.0
62.5°	58.8	81.2	130.8	170.0	203.8
65°	19.8	37.8	84.4	101.8	113.4
67.5°	10.0	12.1	44.3	46.8	50.6
70°	7.9	7.9	21.1	22.5	26.4
72.5°	5.8	5.8	8.4	10.8	11.6
75°	2.6	2.6	1.3	0.0	0.0
77.5°	1.3	1.3	1.1	0.0	0.0
80°	1.3	1.3	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°	0.5	2.0	3.6	4.6	4.6
90°	2.5	10.0	17.8	22.8	22.8
92.5°	35.0	149.5	259.2	99.5	81.7
95°	83.7	306.8	994.0	425.1	271.3
97.5°	136.4	340.2	1516.9	1168.8	824.6
100°	175.0	360.9	1681.2	1696.9	1384.5
102.5°	211.5	385.5	1723.8	2105.3	1818.7
105°	276.4	425.2	1704.0	2595.2	2421.7
107.5°	338.3	474.1	1607.2	2835.2	2886.7
110°	382.9	506.9	1534.1	2894.8	3073.4

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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	423.5	543.5	1461.1	2856.4	3128.1
115°	489.4	596.0	1366.8	2721.6	3088.6
117.5°	552.3	650.5	1306.9	2532.5	2947.6
120°	590.8	685.1	1280.6	2390.8	2819.8
122.5°	625.3	719.5	1262.3	2266.6	2673.7
125°	674.5	768.7	1240.0	2097.7	2457.2
127.5°	721.2	810.9	1225.3	1956.7	2272.1
130°	745.5	837.3	1217.2	1872.9	2160.5
132.5°	773.9	865.7	1211.1	1799.2	2059.1
135°	814.0	903.2	1204.5	1696.4	1919.6
137.5°	851.5	934.3	1198.9	1613.4	1797.4
140°	879.9	956.8	1196.9	1558.2	1724.3
142.5°	904.3	975.2	1192.8	1509.0	1651.3
145°	940.8	1005.2	1186.7	1445.4	1557.0
147.5°	979.8	1035.4	1183.7	1389.1	1478.4
150°	1004.2	1053.8	1181.7	1358.2	1427.6
152.5°	1026.5	1072.1	1179.6	1331.6	1389.1
155°	1065.0	1099.7	1179.1	1299.2	1336.4
157.5°	1092.9	1121.2	1179.1	1272.5	1298.3
160°	1113.2	1135.5	1179.1	1258.2	1278.0
162.5°	1129.4	1147.8	1181.2	1245.9	1261.8
165°	1151.2	1166.1	1184.2	1232.6	1240.0
167.5°	1166.5	1177.9	1186.7	1221.3	1223.3
170°	1176.6	1184.0	1186.7	1217.2	1217.2
172.5°	1184.7	1188.2	1186.7	1211.0	1209.1
175°	1191.8	1194.3	1186.7	1201.9	1199.4
177.5°	1193.8	1193.8	1185.7	1197.8	1193.8
180°	1191.8	1191.8	1191.8	1191.8	1191.8

(END OF REPORT)