

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: P521091

Luminaire Tested: **SQ4-BB-075U-050D-93050-1D-UNV-STD-W-4 (4500K)**

Issue Date: 5/5/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P521091  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2101-105-50,  
Test Lab: INNOVATION CENTER  
Issue Date: 5/5/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: SQ4-BB-075U-050D-93050-1D-UNV-STD-W-4 (4500K)  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE  
DOWNLIGHT 500 LUMENS PER FOOT  
UPLIGHT 750 LUMENS PER FOOT  
Light Source: 3000K/5000K CCT, 90 CRI LEDS, TUNED TO 4500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

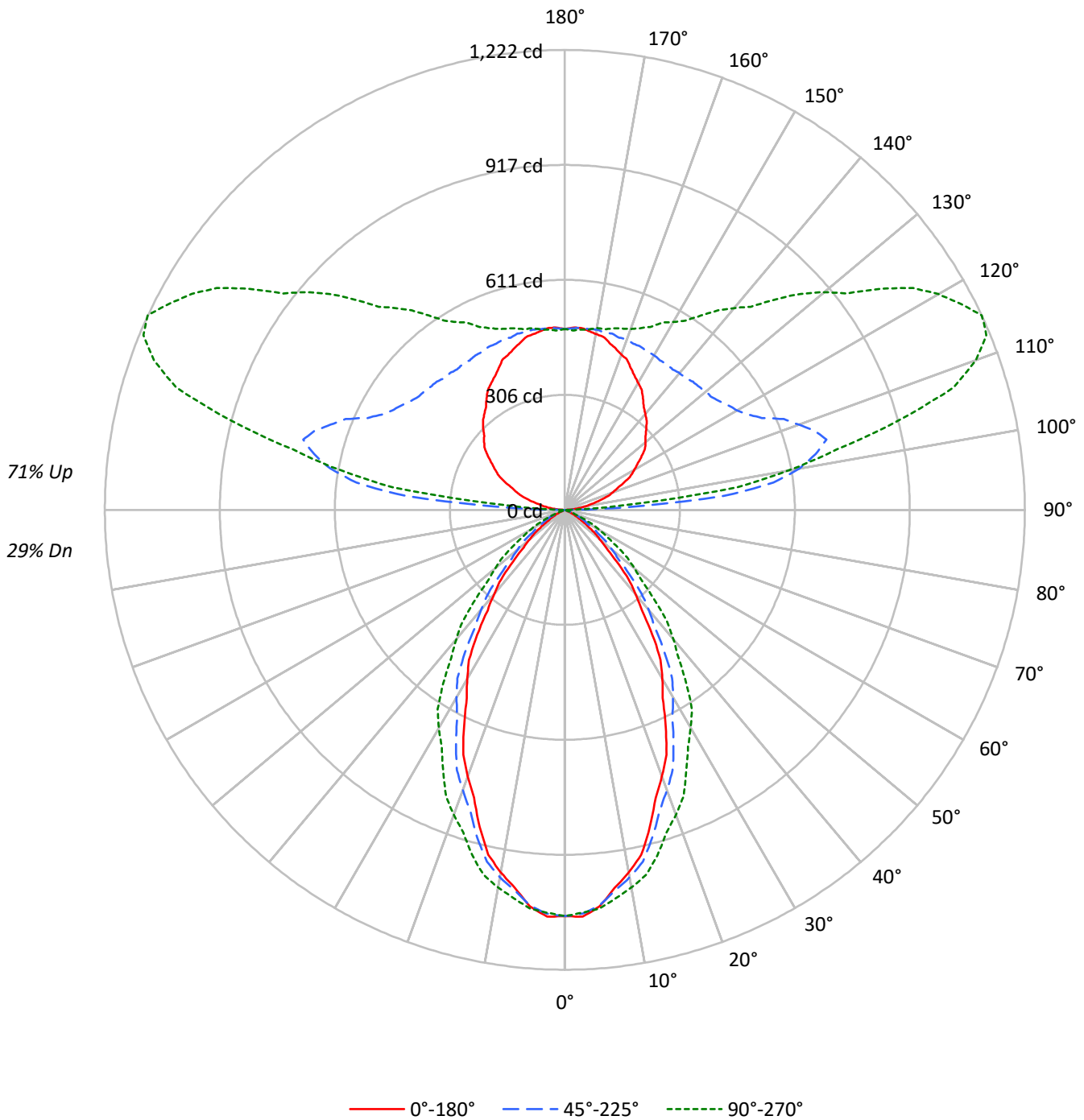
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4398.9 lumens  
Efficiency: N/A  
Efficacy: 98.9 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): 44.5  
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	29				
1	94	90	87	84	84	81	79	76	64	63	61	49	48	47	34	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	71	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	31	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	38	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	20	20	18	16	14				
9	50	39	32	28	46	36	30	26	30	25	22	24	21	19	18	16	15	13				
10	47	36	30	25	43	33	27	23	28	23	20	22	19	17	17	15	14	12				

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

	0°	45°	90°
0°	9958	9958	9958
5°	9798	9774	9846
10°	9167	9290	9548
15°	8334	8598	9077
20°	7398	7782	8464
25°	6442	6953	7776
30°	5519	6125	7126
35°	4575	5199	6340
40°	3516	4156	5402
45°	2542	3147	4346
50°	1731	2345	3448
55°	1126	1697	2680
60°	646	1194	1938
65°	170	729	980
70°	84	227	281
75°	36	18	0
80°	27	0	0
85°	0	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	98.5	2.2
10°-20°	251.9	5.7
20°-30°	315.3	7.2
30°-40°	291.3	6.6
40°-50°	195.7	4.4
50°-60°	101.1	2.3
60°-70°	31.7	0.7
70°-80°	2.0	0.0
80°-90°	0.0	0.0
90°-100°	247.7	5.6
100°-110°	598.7	13.6
110°-120°	638.5	14.5
120°-130°	517.2	11.8
130°-140°	400.4	9.1
140°-150°	305.5	6.9
150°-160°	221.1	5.0
160°-170°	136.2	3.1
170°-180°	46.1	1.0
0°-30°	665.7	15.1
0°-40°	957.0	21.8
0°-60°	1253.8	28.5
0°-90°	1287.5	29.3
90°-120°	1485.0	33.8
90°-150°	2708.0	61.6
90°-180°	3111.0	70.7
0°-180°	4398.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1079	1079	1079	1079	1079	
5°	1058	1047	1055	1059	1063	98
15°	872	869	900	930	950	243
25°	633	638	683	730	764	290
35°	406	416	462	516	563	252
45°	195	206	241	288	333	153
55°	70	82	106	135	167	65
65°	8	15	33	40	45	13
75°	1	1	0	0	0	1
85°	0	0	0	0	0	0
90°	0	0	0	0	0	1
95°	24	124	424	276	193	27
105°	96	165	720	931	919	101
115°	175	224	578	1096	1222	173
125°	249	287	502	872	1024	222
135°	306	342	481	687	791	237
145°	362	389	472	584	630	226
155°	415	433	478	518	536	192
165°	459	466	484	492	499	130
175°	486	484	486	481	480	46
180°	480	480	480	480	480	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1079.3	1079.3	1079.3	1079.3	1079.3
2.5°	1081.8	1071.6	1074.3	1074.2	1071.3
5°	1057.9	1047.1	1055.3	1059.0	1063.1
7.5°	1013.2	1004.8	1020.4	1032.1	1040.5
10°	978.5	971.4	991.6	1007.5	1019.2
12.5°	938.4	932.9	957.3	979.2	994.2
15°	872.5	869.4	900.2	930.4	950.3
17.5°	801.9	801.8	836.9	874.4	898.4
20°	753.5	755.0	792.6	834.0	862.1
22.5°	705.0	708.6	748.8	791.9	824.0
25°	632.8	637.9	683.0	729.7	763.9
27.5°	563.5	571.0	618.3	666.9	708.5
30°	518.0	526.6	574.9	626.0	668.9
32.5°	473.3	483.6	530.6	584.6	628.3
35°	406.2	416.4	461.6	515.9	562.9
37.5°	337.0	347.0	391.1	444.6	495.3
40°	291.9	303.1	345.1	397.0	448.5
42.5°	250.9	262.2	301.7	352.6	401.3
45°	194.8	206.5	241.2	288.2	333.1
47.5°	148.2	160.9	191.4	233.9	274.9
50°	120.6	133.4	163.4	200.9	240.2
52.5°	98.5	110.8	138.0	173.2	209.3
55°	70.0	81.7	105.5	135.4	166.6
57.5°	48.4	58.5	79.8	104.8	129.2
60°	35.0	44.7	64.7	85.0	105.0
62.5°	23.3	32.2	51.8	67.3	80.7
65°	7.8	15.0	33.4	40.3	44.9
67.5°	4.0	4.8	17.5	18.5	20.1
70°	3.1	3.1	8.4	8.9	10.4
72.5°	2.3	2.3	3.3	4.3	4.6
75°	1.0	1.0	0.5	0.0	0.0
77.5°	0.5	0.5	0.4	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°	0.0	0.0	0.0	0.0	0.0
92.5°	8.1	67.1	158.0	76.8	52.1
95°	24.4	123.9	424.4	276.0	193.4
97.5°	43.4	137.3	559.0	538.5	462.3
100°	58.0	145.6	633.1	668.3	605.6
102.5°	71.9	153.1	681.9	776.3	739.1
105°	95.7	165.3	719.6	931.0	919.1
107.5°	119.1	179.8	697.4	1055.1	1083.1
110°	135.4	192.1	661.6	1108.5	1161.3



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	151.6	204.4	629.8	1121.6	1211.8
115°	175.1	223.8	578.1	1096.0	1222.4
117.5°	198.3	244.2	547.8	1037.0	1185.1
120°	213.7	256.5	528.2	990.8	1146.0
122.5°	230.0	269.6	516.0	943.5	1096.4
125°	249.4	287.2	501.8	871.6	1023.9
127.5°	268.5	304.1	491.8	810.8	944.5
130°	279.9	314.7	488.5	768.4	899.7
132.5°	290.5	326.9	483.7	737.8	849.2
135°	306.4	342.2	481.4	687.3	790.8
137.5°	321.4	357.4	474.3	653.2	731.2
140°	332.8	365.7	474.3	628.6	700.2
142.5°	344.2	377.1	470.2	607.2	667.7
145°	362.3	389.2	472.3	584.2	630.0
147.5°	379.2	405.3	471.0	557.8	595.6
150°	389.8	412.7	474.3	546.2	576.1
152.5°	401.2	423.3	473.5	533.9	560.6
155°	415.3	433.2	478.4	517.5	536.4
157.5°	432.2	447.5	477.3	511.2	522.3
160°	438.7	451.6	481.4	503.0	510.9
162.5°	449.3	460.6	479.8	500.5	505.2
165°	459.0	466.0	484.5	491.7	498.7
167.5°	471.0	475.6	483.2	491.2	491.4
170°	474.3	477.3	486.5	485.6	490.6
172.5°	480.0	482.2	484.1	486.2	483.2
175°	485.5	483.5	485.5	481.4	480.4
177.5°	484.5	484.5	482.8	481.1	477.1
180°	480.4	480.4	480.4	480.4	480.4

(END OF REPORT)