

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: P521090

Luminaire Tested: **SQ4-BB-075U-050D-93050-1D-UNV-STD-W-4 (4000K)**

Issue Date: 5/5/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P521090  
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 (4000K)  
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 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

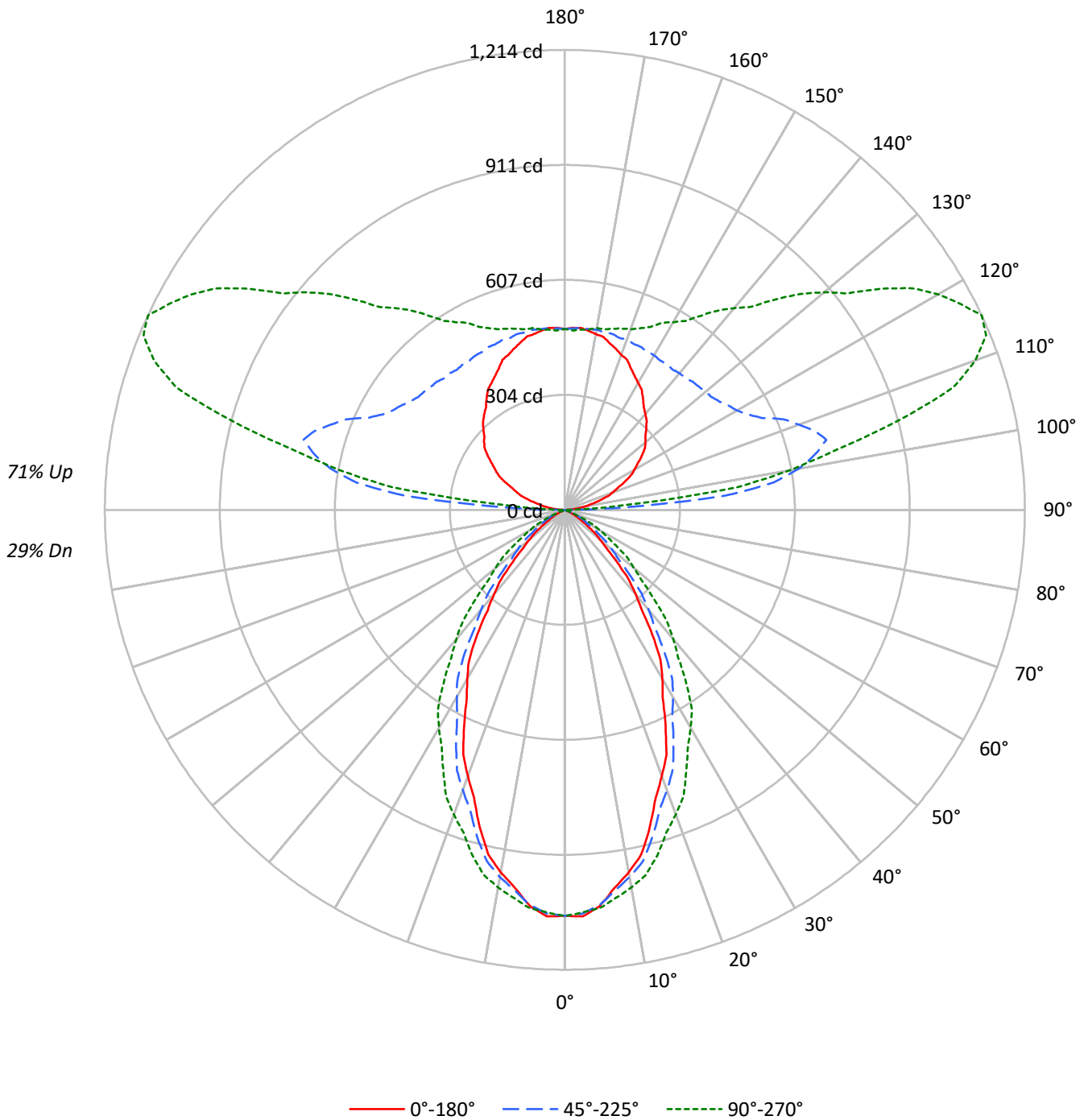
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4368.0 lumens  
Efficiency: N/A  
Efficacy: 98.2 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	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°	9888	9888	9888
5°	9728	9704	9776
10°	9102	9224	9482
15°	8276	8538	9013
20°	7346	7728	8404
25°	6397	6904	7722
30°	5479	6081	7076
35°	4544	5162	6295
40°	3490	4127	5364
45°	2523	3125	4316
50°	1720	2330	3423
55°	1118	1684	2661
60°	640	1186	1923
65°	170	725	974
70°	84	224	281
75°	36	18	0
80°	27	0	0
85°	0	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	97.8	2.2
10°-20°	250.1	5.7
20°-30°	313.1	7.2
30°-40°	289.2	6.6
40°-50°	194.3	4.4
50°-60°	100.4	2.3
60°-70°	31.4	0.7
70°-80°	2.0	0.0
80°-90°	0.0	0.0
90°-100°	246.0	5.6
100°-110°	594.5	13.6
110°-120°	634.1	14.5
120°-130°	513.5	11.8
130°-140°	397.6	9.1
140°-150°	303.3	6.9
150°-160°	219.6	5.0
160°-170°	135.2	3.1
170°-180°	45.8	1.0
0°-30°	661.0	15.1
0°-40°	950.3	21.8
0°-60°	1245.0	28.5
0°-90°	1278.4	29.3
90°-120°	1474.5	33.8
90°-150°	2689.0	61.6
90°-180°	3090.0	70.7
0°-180°	4368.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1072	1072	1072	1072	1072	
5°	1050	1040	1048	1052	1056	97
15°	866	863	894	924	944	241
25°	628	634	678	725	758	288
35°	403	414	458	512	559	250
45°	193	205	240	286	331	152
55°	70	81	105	134	165	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	123	421	274	192	27
105°	95	164	714	924	913	100
115°	174	222	574	1088	1214	172
125°	248	285	498	866	1017	221
135°	304	340	478	682	785	235
145°	360	386	469	580	626	225
155°	412	430	475	514	533	190
165°	456	463	481	488	495	129
175°	482	480	482	478	477	46
180°	477	477	477	477	477	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1071.7	1071.7	1071.7	1071.7	1071.7
2.5°	1074.2	1064.0	1066.7	1066.7	1063.8
5°	1050.4	1039.8	1047.8	1051.6	1055.6
7.5°	1006.1	997.7	1013.2	1024.8	1033.2
10°	971.6	964.5	984.6	1000.4	1012.1
12.5°	931.8	926.3	950.6	972.3	987.2
15°	866.4	863.3	893.9	923.9	943.6
17.5°	796.3	796.2	831.0	868.3	892.1
20°	748.2	749.7	787.1	828.1	856.0
22.5°	700.1	703.6	743.5	786.3	818.3
25°	628.4	633.5	678.2	724.6	758.5
27.5°	559.5	566.9	614.0	662.2	703.6
30°	514.3	523.0	570.8	621.6	664.2
32.5°	470.0	480.2	526.9	580.5	623.9
35°	403.4	413.5	458.3	512.3	558.9
37.5°	334.6	344.6	388.3	441.4	491.8
40°	289.8	301.0	342.7	394.2	445.4
42.5°	249.2	260.3	299.6	350.1	398.5
45°	193.4	205.1	239.5	286.2	330.8
47.5°	147.1	159.8	190.1	232.3	272.9
50°	119.8	132.4	162.3	199.5	238.5
52.5°	97.8	110.1	137.0	172.0	207.8
55°	69.5	81.1	104.7	134.5	165.4
57.5°	48.0	58.0	79.2	104.0	128.3
60°	34.7	44.4	64.3	84.4	104.2
62.5°	23.1	31.9	51.4	66.9	80.2
65°	7.8	14.9	33.2	40.0	44.6
67.5°	3.9	4.8	17.4	18.4	19.9
70°	3.1	3.1	8.3	8.8	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	66.6	156.9	76.3	51.7
95°	24.3	123.1	421.4	274.0	192.0
97.5°	43.1	136.3	555.0	534.7	459.0
100°	57.6	144.6	628.6	663.6	601.3
102.5°	71.4	152.0	677.1	770.9	733.9
105°	95.0	164.2	714.5	924.5	912.6
107.5°	118.2	178.5	692.5	1047.7	1075.5
110°	134.4	190.7	656.9	1100.8	1153.1



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	150.6	203.0	625.4	1113.7	1203.3
115°	173.8	222.3	574.0	1088.3	1213.8
117.5°	196.9	242.5	543.9	1029.8	1176.8
120°	212.2	254.7	524.5	983.8	1138.0
122.5°	228.4	267.7	512.4	936.9	1088.7
125°	247.6	285.2	498.2	865.5	1016.7
127.5°	266.6	302.0	488.3	805.1	937.9
130°	277.9	312.5	485.1	763.0	893.4
132.5°	288.4	324.6	480.3	732.6	843.3
135°	304.2	339.8	478.0	682.5	785.3
137.5°	319.2	354.9	471.0	648.6	726.0
140°	330.5	363.1	471.0	624.2	695.3
142.5°	341.8	374.4	466.9	602.9	663.0
145°	359.8	386.5	468.9	580.1	625.6
147.5°	376.6	402.5	467.7	553.9	591.4
150°	387.1	409.8	471.0	542.4	572.0
152.5°	398.4	420.3	470.2	530.2	556.7
155°	412.3	430.1	475.0	513.8	532.6
157.5°	429.1	444.3	474.0	507.6	518.7
160°	435.6	448.4	478.0	499.4	507.3
162.5°	446.1	457.4	476.4	496.9	501.7
165°	455.8	462.7	481.1	488.3	495.2
167.5°	467.7	472.3	479.9	487.7	487.9
170°	471.0	473.9	483.1	482.2	487.1
172.5°	476.6	478.8	480.7	482.8	479.9
175°	482.1	480.1	482.1	478.0	477.0
177.5°	481.1	481.1	479.4	477.7	473.8
180°	477.0	477.0	477.0	477.0	477.0

(END OF REPORT)