

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: P519134

Luminaire Tested: **SQ4-WB-050U-100D-935-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P519134  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-21, G2-2009-966-13)  
Test Lab: INNOVATION CENTER  
Issue Date: 4/29/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: SQ4-WB-050U-100D-935-1D-UNV-STD-W-8  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE  
DOWNLIGHT 1000 LUMENS PER FOOT  
UPLIGHT 500 LUMENS PER FOOT  
Light Source: 3500K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

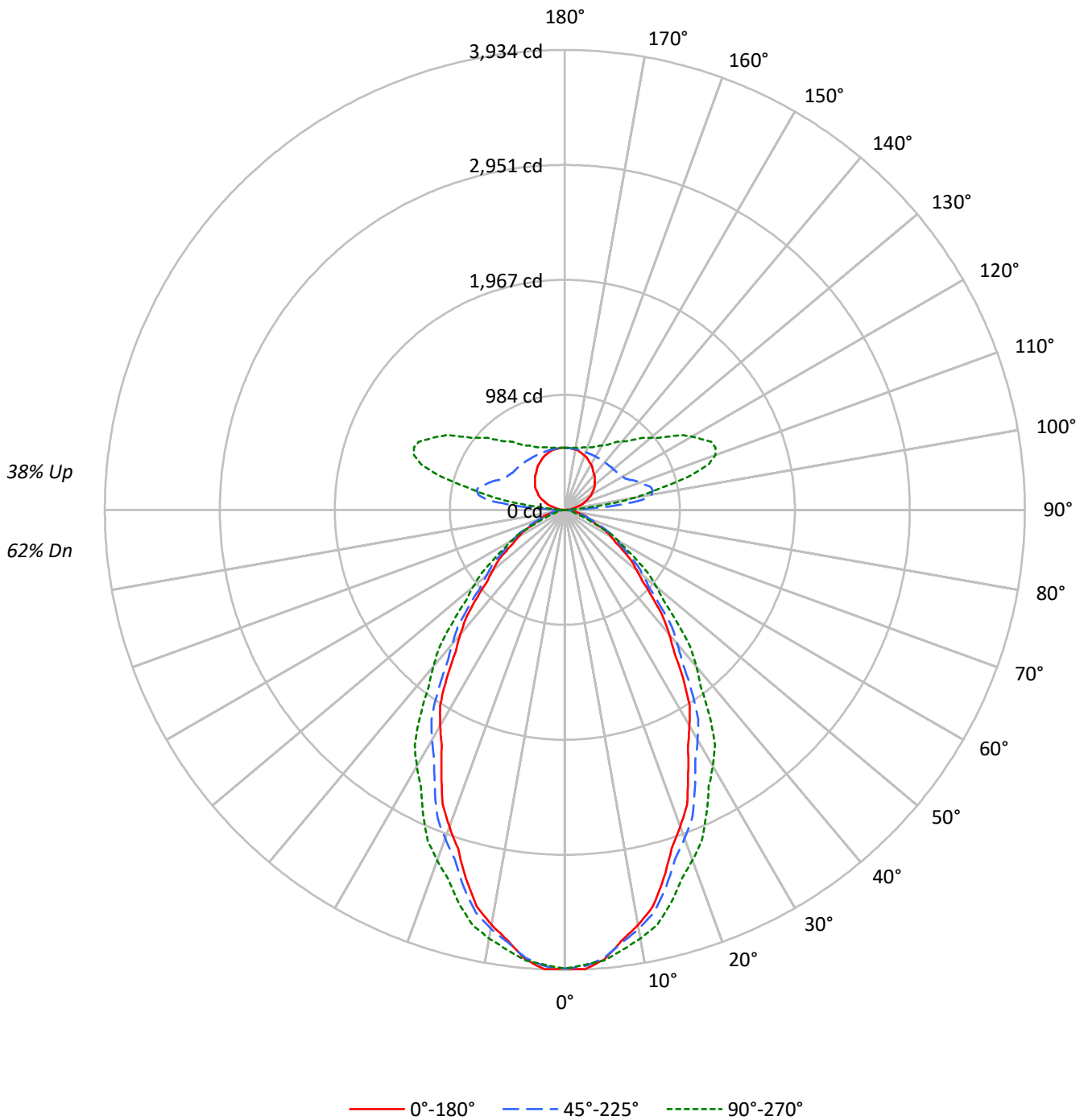
Lumens per Lamp: N/A  
Luminaire Lumens: 9181.6 lumens  
Efficiency: N/A  
Efficacy: 96.2 lumens/watt  
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02  
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')  
CIE Type: Semi-Direct

Input Watts (W): 95.4  
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	0
RCR																		
0	110	110	110	110	103	103	103	103	90	90	90	78	78	78	67	67	67	62
1	102	98	95	92	95	92	89	87	81	79	77	71	70	68	62	61	60	55
2	94	87	82	77	88	82	78	73	73	69	66	64	62	59	56	54	53	49
3	87	78	72	66	81	74	68	63	66	61	57	58	55	52	51	49	47	43
4	80	70	63	58	75	67	60	55	60	54	50	53	49	46	47	44	41	38
5	74	64	56	51	70	60	54	49	54	49	45	48	44	41	43	40	37	34
6	69	58	50	45	65	55	48	43	50	44	40	44	40	37	40	36	34	31
7	64	53	45	40	61	50	44	39	45	40	36	41	37	33	37	33	31	28
8	60	49	41	36	57	46	40	35	42	36	33	38	33	30	34	31	28	26
9	56	45	38	33	53	43	36	32	39	33	30	35	31	28	32	28	26	24
10	53	41	35	30	50	40	33	29	36	31	27	33	29	25	30	26	24	22

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

	0°	45°	90°
0°	18102	18102	18102
5°	17876	17812	17916
10°	16889	17042	17438
15°	15591	15953	16668
20°	14158	14691	15663
25°	12699	13391	14592
30°	11355	12098	13483
35°	9929	10646	12169
40°	8357	9021	10535
45°	6897	7492	8796
50°	5759	6277	7327
55°	4888	5387	6051
60°	4178	4670	4829
65°	3327	3928	3120
70°	2950	3066	1904
75°	2731	2486	1166
80°	2516	2287	1007
85°	2276	2096	820



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	359.9	3.9
10°-20°	936.2	10.2
20°-30°	1212.6	13.2
30°-40°	1187.5	12.9
40°-50°	908.9	9.9
50°-60°	605.7	6.6
60°-70°	330.5	3.6
70°-80°	137.7	1.5
80°-90°	41.0	0.4
90°-100°	254.5	2.8
100°-110°	691.4	7.5
110°-120°	710.8	7.7
120°-130°	568.3	6.2
130°-140°	446.6	4.9
140°-150°	342.4	3.7
150°-160°	246.2	2.7
160°-170°	150.6	1.6
170°-180°	50.7	0.6
0°-30°	2508.7	27.3
0°-40°	3696.2	40.3
0°-60°	5210.8	56.8
0°-90°	5720.0	62.3
90°-120°	1656.7	18.0
90°-150°	3014.0	32.8
90°-180°	3462.0	37.7
0°-180°	9181.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	3924	3924	3924	3924	3924	
5°	3860	3822	3846	3855	3869	359
15°	3265	3253	3340	3431	3490	912
25°	2495	2502	2631	2746	2867	1147
35°	1763	1772	1890	2018	2161	1096
45°	1057	1077	1148	1235	1348	824
55°	608	633	670	695	752	551
65°	305	330	360	314	286	317
75°	153	153	140	96	65	164
85°	43	43	40	26	16	47
90°	2	7	12	15	15	5
95°	38	139	443	193	130	40
105°	123	191	760	1158	1089	130
115°	218	265	609	1211	1379	215
125°	300	342	551	928	1094	267
135°	361	401	535	756	852	279
145°	418	448	528	642	690	262
155°	472	489	525	577	593	218
165°	511	518	527	549	551	144
175°	530	532	528	535	534	50
180°	530	530	530	530	530	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	3924.0	3924.0	3924.0	3924.0	3924.0
2.5°	3933.6	3898.6	3907.5	3907.2	3896.5
5°	3860.3	3821.6	3846.5	3855.4	3868.9
7.5°	3717.0	3687.7	3733.2	3766.9	3794.2
10°	3605.5	3580.2	3638.2	3687.2	3722.6
12.5°	3476.0	3454.8	3526.6	3592.4	3638.5
15°	3264.6	3252.8	3340.3	3431.2	3490.1
17.5°	3038.3	3032.6	3133.0	3239.1	3314.5
20°	2884.0	2882.3	2992.5	3103.0	3190.5
22.5°	2728.4	2732.1	2847.9	2962.7	3062.4
25°	2494.9	2501.6	2630.9	2745.6	2866.8
27.5°	2279.0	2282.0	2415.7	2536.8	2666.0
30°	2131.6	2140.0	2271.1	2396.4	2531.1
32.5°	1984.2	1994.0	2122.3	2251.8	2389.2
35°	1763.1	1771.6	1890.5	2017.8	2160.9
37.5°	1535.2	1546.6	1652.2	1772.5	1913.3
40°	1387.8	1404.6	1498.0	1611.3	1749.4
42.5°	1245.9	1266.8	1353.3	1460.9	1585.4
45°	1057.2	1077.4	1148.4	1235.4	1348.2
47.5°	894.7	917.9	972.5	1047.3	1143.6
50°	802.4	824.2	874.7	930.1	1021.0
52.5°	721.1	743.0	787.9	830.6	908.1
55°	607.8	633.1	669.8	695.2	752.4
57.5°	514.8	539.1	568.2	579.7	614.3
60°	452.8	479.8	506.2	504.9	523.4
62.5°	396.4	419.3	445.6	427.4	428.4
65°	304.8	330.0	359.9	314.4	285.8
67.5°	246.2	251.6	282.4	219.3	185.3
70°	218.7	218.7	227.3	169.8	141.2
72.5°	192.5	192.5	184.6	138.1	108.1
75°	153.2	153.2	139.5	95.7	65.4
77.5°	118.1	116.8	106.8	71.4	47.5
80°	94.7	94.7	86.1	56.4	37.9
82.5°	74.0	74.0	66.8	44.1	28.2
85°	43.0	43.0	39.6	25.6	15.5
87.5°	15.5	16.5	16.2	11.3	10.0
90°	1.7	6.7	11.9	15.3	15.3
92.5°	15.3	69.7	121.0	52.0	44.0
95°	37.5	139.2	443.2	192.9	129.6
97.5°	62.1	153.7	679.5	528.6	371.3
100°	78.4	163.4	751.8	762.1	615.4
102.5°	94.8	173.1	770.9	942.5	813.1
105°	122.7	191.1	760.3	1157.6	1089.3
107.5°	151.7	212.1	716.3	1268.7	1287.7
110°	172.2	227.2	683.6	1290.6	1372.3

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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	189.9	242.2	650.8	1272.4	1395.4
115°	218.2	264.9	608.6	1210.7	1379.1
117.5°	244.8	289.5	581.6	1123.3	1312.9
120°	262.5	305.9	569.4	1064.6	1252.9
122.5°	277.5	320.9	561.2	1005.8	1187.5
125°	300.0	341.7	550.6	927.7	1094.4
127.5°	320.1	361.5	544.8	868.5	1011.6
130°	332.4	372.4	542.1	831.4	959.7
132.5°	344.7	384.7	539.4	799.7	913.4
135°	361.4	401.4	535.3	755.7	852.3
137.5°	379.5	415.8	533.2	716.8	798.1
140°	390.4	425.4	531.9	692.1	765.4
142.5°	401.3	433.6	530.5	672.7	734.0
145°	417.6	447.6	528.4	642.1	690.4
147.5°	436.1	461.7	526.7	618.0	656.0
150°	448.3	470.0	526.7	604.1	634.1
152.5°	457.9	476.9	525.4	591.7	616.4
155°	472.2	488.9	525.0	576.6	593.2
157.5°	486.2	499.2	525.0	566.2	578.9
160°	494.4	506.0	525.0	559.4	569.4
162.5°	502.5	511.5	526.4	553.8	561.2
165°	511.4	518.1	526.7	548.9	550.6
167.5°	520.6	523.9	528.4	543.1	544.5
170°	523.3	526.7	528.4	540.4	540.4
172.5°	526.1	528.1	528.4	537.7	537.7
175°	530.2	531.8	528.4	535.2	533.6
177.5°	531.5	531.5	527.4	532.8	530.2
180°	530.2	530.2	530.2	530.2	530.2

(END OF REPORT)