

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: P519368

Luminaire Tested: **SQ4-WB-100U-050D-930-1D-UNV-STD-W-4**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P519368  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-23, 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-100U-050D-930-1D-UNV-STD-W-4  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE  
DOWNLIGHT 500 LUMENS PER FOOT  
UPLIGHT 1000 LUMENS PER FOOT  
Light Source: 3000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

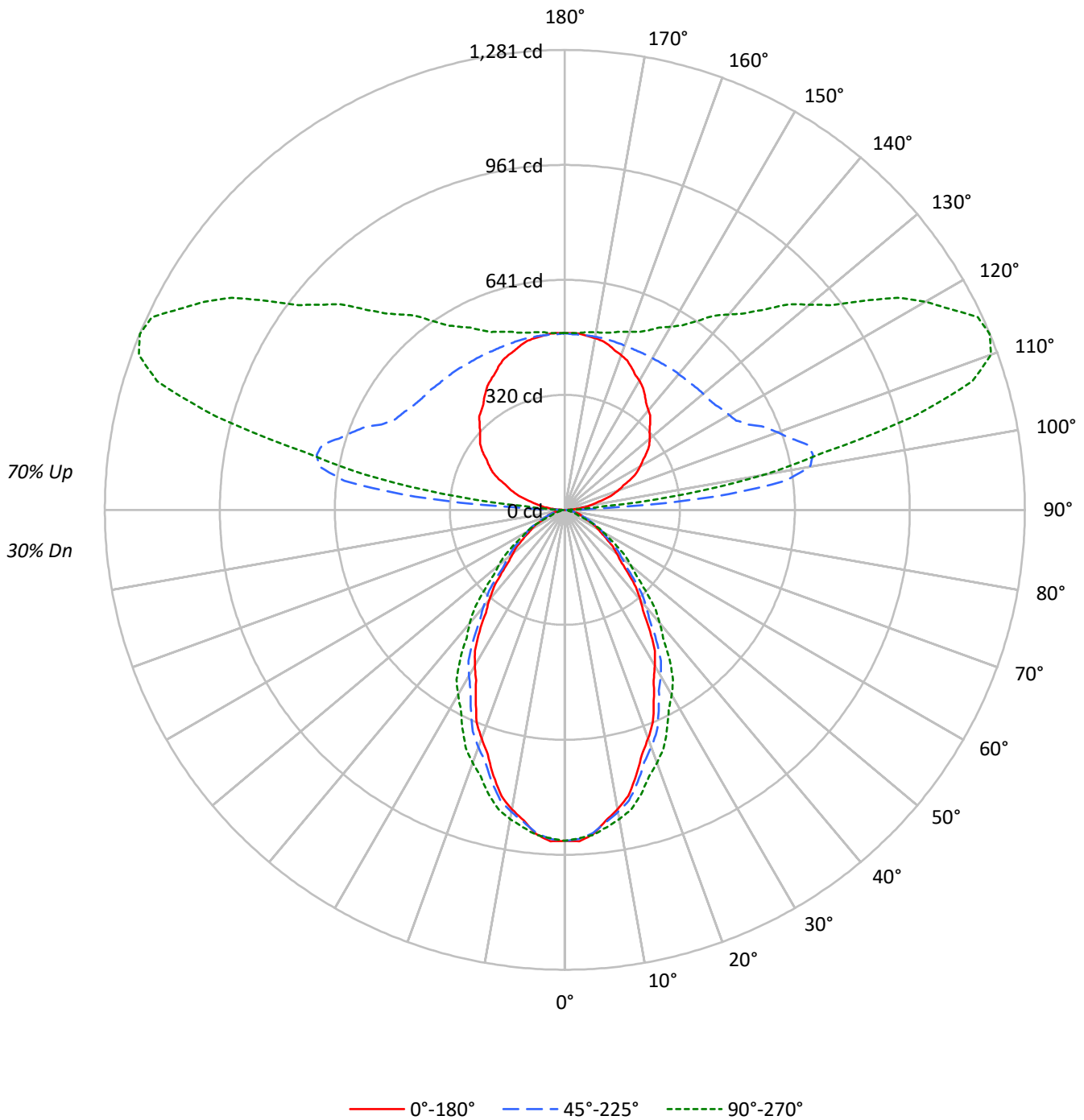
Lumens per Lamp: N/A  
Luminaire Lumens: 4540.5 lumens  
Efficiency: N/A  
Efficacy: 109.9 lumens/watt  
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02  
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')  
CIE Type: Semi-Indirect

Input Watts (W): 41.3  
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	30
1	94	90	86	83	84	81	78	75	64	62	60	48	47	46	34	33	33	26
2	86	79	74	69	77	72	67	63	57	54	51	43	41	40	31	30	29	23
3	79	70	64	58	71	64	58	53	51	47	44	39	36	34	28	27	25	20
4	72	63	55	50	65	57	51	46	46	41	38	35	32	30	25	24	22	18
5	67	56	49	43	60	51	44	40	41	36	33	32	29	26	23	21	20	16
6	62	50	43	38	55	46	39	35	37	33	29	29	26	23	21	19	18	15
7	57	46	38	33	51	42	35	31	34	29	26	27	23	21	20	18	16	13
8	53	42	34	29	48	38	32	27	31	26	23	24	21	19	18	16	15	12
9	49	38	31	26	44	35	29	24	28	24	21	23	19	17	17	15	14	11
10	46	35	28	24	42	32	26	22	26	22	19	21	18	16	16	14	12	10

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

	0°	45°	90°
0°	8507	8507	8507
5°	8400	8370	8419
10°	7936	8008	8194
15°	7326	7496	7832
20°	6653	6903	7360
25°	5968	6293	6857
30°	5335	5685	6336
35°	4666	5003	5718
40°	3928	4239	4950
45°	3241	3520	4134
50°	2706	2950	3443
55°	2297	2532	2844
60°	1963	2194	2270
65°	1563	1847	1467
70°	1387	1440	896
75°	1283	1169	549
80°	1185	1073	473
85°	1069	984	381



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	84.6	1.9
10°-20°	220.0	4.8
20°-30°	284.9	6.3
30°-40°	279.0	6.1
40°-50°	213.6	4.7
50°-60°	142.3	3.1
60°-70°	77.7	1.7
70°-80°	32.4	0.7
80°-90°	10.2	0.2
90°-100°	230.4	5.1
100°-110°	635.9	14.0
110°-120°	655.9	14.4
120°-130°	527.0	11.6
130°-140°	414.2	9.1
140°-150°	317.7	7.0
150°-160°	228.3	5.0
160°-170°	139.6	3.1
170°-180°	47.1	1.0
0°-30°	589.4	13.0
0°-40°	868.4	19.1
0°-60°	1224.3	27.0
0°-90°	1344.5	29.6
90°-120°	1522.1	33.5
90°-150°	2781.0	61.2
90°-180°	3196.0	70.4
0°-180°	4540.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	922	922	922	922	922	
5°	907	898	904	906	909	84
15°	767	764	785	806	820	214
25°	586	588	618	645	674	270
35°	414	416	444	474	508	258
45°	248	253	270	290	317	194
55°	143	149	157	163	177	129
65°	72	78	85	74	67	74
75°	36	36	33	22	15	38
85°	10	10	9	6	4	11
90°	2	3	6	7	8	3
95°	34	125	418	172	112	36
105°	113	175	700	1068	1006	121
115°	203	245	564	1116	1269	200
125°	279	317	511	864	1014	248
135°	335	371	497	700	789	259
145°	389	416	490	596	641	243
155°	438	453	486	535	552	202
165°	475	481	489	508	512	134
175°	492	493	490	497	495	47
180°	492	492	492	492	492	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	922.0	922.0	922.0	922.0	922.0
2.5°	924.2	916.0	918.1	918.0	915.5
5°	907.0	897.9	903.8	905.9	909.0
7.5°	873.3	866.5	877.1	885.1	891.5
10°	847.1	841.2	854.8	866.3	874.6
12.5°	816.7	811.7	828.6	844.1	854.9
15°	767.0	764.3	784.8	806.2	820.0
17.5°	713.9	712.5	736.1	761.0	778.8
20°	677.6	677.2	703.1	729.1	749.6
22.5°	641.0	641.9	669.1	696.1	719.5
25°	586.2	587.8	618.2	645.1	673.6
27.5°	535.5	536.2	567.6	596.0	626.4
30°	500.8	502.8	533.6	563.0	594.7
32.5°	466.2	468.5	498.6	529.1	561.4
35°	414.3	416.2	444.2	474.1	507.7
37.5°	360.7	363.4	388.2	416.5	449.5
40°	326.1	330.0	352.0	378.6	411.0
42.5°	292.7	297.6	318.0	343.2	372.5
45°	248.4	253.1	269.8	290.3	316.8
47.5°	210.2	215.7	228.5	246.1	268.7
50°	188.5	193.7	205.5	218.5	239.9
52.5°	169.4	174.6	185.1	195.2	213.4
55°	142.8	148.7	157.4	163.3	176.8
57.5°	121.0	126.7	133.5	136.2	144.3
60°	106.4	112.7	118.9	118.6	123.0
62.5°	93.1	98.5	104.7	100.4	100.7
65°	71.6	77.5	84.6	73.9	67.2
67.5°	57.9	59.1	66.3	51.5	43.5
70°	51.4	51.4	53.4	39.9	33.2
72.5°	45.2	45.2	43.4	32.4	25.4
75°	36.0	36.0	32.8	22.5	15.4
77.5°	27.8	27.4	25.1	16.8	11.2
80°	22.3	22.3	20.2	13.3	8.9
82.5°	17.4	17.4	15.7	10.4	6.6
85°	10.1	10.1	9.3	6.0	3.6
87.5°	3.9	4.2	4.5	3.4	3.2
90°	1.6	3.1	6.3	7.1	7.9
92.5°	14.2	58.8	105.1	38.4	29.9
95°	33.8	124.6	417.9	171.8	111.8
97.5°	56.0	139.6	619.1	476.6	345.2
100°	72.4	148.6	693.4	698.3	567.4
102.5°	88.1	158.8	707.8	862.7	738.7
105°	113.3	174.9	699.7	1068.1	1005.8
107.5°	140.1	194.9	660.6	1167.2	1190.0
110°	159.0	208.2	630.4	1188.5	1262.4



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	176.0	223.4	602.1	1171.7	1280.6
115°	203.0	245.4	563.5	1115.5	1268.7
117.5°	226.7	268.8	538.2	1036.5	1210.7
120°	242.4	284.0	528.1	983.0	1158.5
122.5°	257.5	297.2	519.9	933.1	1099.3
125°	278.6	317.1	510.8	864.4	1014.5
127.5°	296.5	335.0	505.4	806.3	935.8
130°	308.5	347.0	502.9	770.8	888.5
132.5°	319.8	356.5	500.4	741.0	847.6
135°	335.3	371.4	496.6	700.1	789.4
137.5°	352.6	385.5	494.7	665.8	742.0
140°	362.0	394.3	493.5	642.9	709.9
142.5°	372.7	402.6	492.2	622.6	681.6
145°	388.8	415.7	490.3	596.0	641.4
147.5°	404.2	427.8	488.6	573.6	608.8
150°	415.5	434.8	487.9	560.2	588.7
152.5°	424.4	442.4	487.3	548.8	572.3
155°	438.4	453.0	486.4	534.8	551.7
157.5°	451.3	462.5	486.5	524.6	536.1
160°	458.8	468.8	487.2	518.8	527.3
162.5°	465.1	473.9	487.8	513.8	520.4
165°	474.6	480.7	488.7	507.7	511.6
167.5°	481.8	485.5	489.5	504.0	505.3
170°	485.6	488.7	489.5	502.1	502.1
172.5°	488.7	490.6	489.5	499.6	499.0
175°	491.9	492.7	489.5	496.6	495.0
177.5°	493.1	492.5	489.4	493.7	492.5
180°	491.9	491.9	491.9	491.9	491.9

(END OF REPORT)