

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: P520184

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

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P520184  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-23, G3-1910-536-17)  
Test Lab: INNOVATION CENTER  
Issue Date: 4/29/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: SQ4-F-100U-050D-930-1D-UNV-STD-W-4  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE  
DOWNLIGHT 500 LUMENS PER FOOT  
UPLIGHT 1000 LUMENS PER FOOT  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

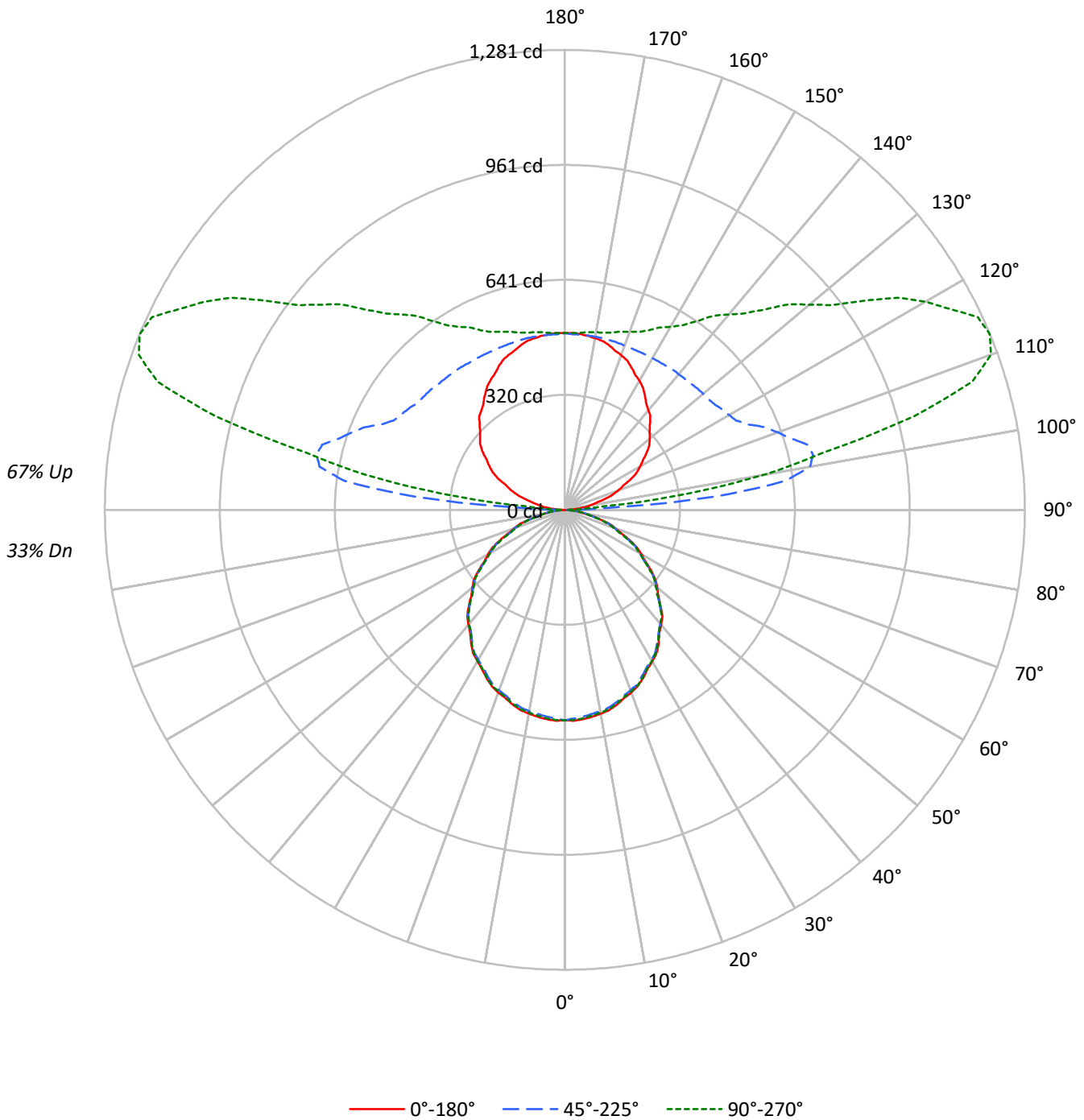
Lumens per Lamp: N/A  
Luminaire Lumens: 4796.8 lumens  
Efficiency: N/A  
Efficacy: 116.1 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35  
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')  
CIE Type: Semi-Indirect

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	103	103	103	103	93	93	93	93	74	74	74	57	57	57	41	41	41	33
1	94	90	86	83	85	81	78	75	65	63	61	50	48	47	36	35	34	28
2	86	78	72	67	77	71	66	61	57	53	50	44	41	39	32	30	29	23
3	78	69	62	56	70	62	56	51	50	46	42	39	36	33	28	26	25	20
4	71	61	53	47	64	55	48	43	44	39	36	34	31	28	25	23	21	17
5	65	54	46	40	59	49	42	37	39	34	31	31	27	24	22	20	18	15
6	60	48	40	35	54	44	37	32	35	30	27	28	24	21	20	18	16	13
7	55	43	36	30	50	39	33	28	32	27	23	25	21	19	18	16	14	11
8	51	39	32	27	46	36	29	25	29	24	20	23	19	17	17	14	13	10
9	48	36	28	23	43	33	26	22	27	22	18	21	17	15	16	13	11	9
10	44	33	26	21	40	30	24	19	24	20	16	19	16	13	14	12	10	8

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

	0°	45°	90°
0°	5407	5407	5407
5°	5421	5356	5399
10°	5403	5336	5374
15°	5367	5299	5344
20°	5316	5254	5293
25°	5256	5192	5240
30°	5183	5141	5174
35°	5126	5064	5091
40°	5027	4981	4990
45°	4926	4884	4884
50°	4821	4775	4752
55°	4708	4644	4618
60°	4532	4460	4430
65°	4316	4233	4181
70°	4022	3936	3852
75°	3611	3497	3411
80°	2917	2874	2795
85°	1747	1990	2075



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	55.3	1.2
10°-20°	157.5	3.3
20°-30°	236.5	4.9
30°-40°	282.4	5.9
40°-50°	289.4	6.0
50°-60°	258.1	5.4
60°-70°	192.2	4.0
70°-80°	104.3	2.2
80°-90°	25.2	0.5
90°-100°	230.3	4.8
100°-110°	635.9	13.3
110°-120°	655.8	13.7
120°-130°	527.0	11.0
130°-140°	414.2	8.6
140°-150°	317.7	6.6
150°-160°	228.3	4.8
160°-170°	139.6	2.9
170°-180°	47.1	1.0
0°-30°	449.3	9.4
0°-40°	731.7	15.3
0°-60°	1279.1	26.7
0°-90°	1600.8	33.4
90°-120°	1522.1	31.7
90°-150°	2781.0	58.0
90°-180°	3196.0	66.6
0°-180°	4796.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	586	586	586	586	586	
5°	585	585	578	584	583	56
15°	562	560	555	560	560	158
25°	516	515	510	513	515	238
35°	455	454	450	450	452	284
45°	378	378	374	374	374	291
55°	293	293	289	286	287	261
65°	198	197	194	192	192	196
75°	101	100	98	96	96	107
85°	16	18	19	20	20	23
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	372	497	700	789	259
145°	389	416	490	596	641	243
155°	438	453	486	535	552	202
165°	474	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°	586.1	586.1	586.1	586.1	586.1
2.5°	588.0	586.8	581.8	586.1	585.5
5°	585.3	584.6	578.3	583.7	583.0
7.5°	581.1	579.6	573.4	578.7	578.0
10°	576.7	575.2	569.6	574.4	573.6
12.5°	571.0	570.1	564.0	568.8	568.6
15°	561.9	560.3	554.8	559.5	559.5
17.5°	549.5	548.6	543.3	547.9	547.3
20°	541.4	539.9	535.1	539.1	539.1
22.5°	531.4	530.5	525.8	529.0	529.6
25°	516.3	514.7	510.0	513.2	514.7
27.5°	499.6	498.5	494.5	496.6	497.7
30°	486.5	486.5	482.6	483.4	485.7
32.5°	474.6	474.6	470.1	470.8	471.9
35°	455.1	453.6	449.6	449.6	452.0
37.5°	432.5	431.7	429.2	428.7	429.3
40°	417.4	416.7	413.6	414.3	414.3
42.5°	402.4	401.6	398.5	397.4	398.6
45°	377.5	378.2	374.3	373.5	374.3
47.5°	352.8	352.8	349.7	347.5	348.7
50°	335.9	335.9	332.7	331.1	331.1
52.5°	318.3	318.9	315.1	313.0	313.6
55°	292.7	292.7	288.7	286.4	287.1
57.5°	264.5	264.5	260.5	258.1	259.5
60°	245.6	245.6	241.7	239.3	240.1
62.5°	226.8	226.8	222.8	220.5	220.7
65°	197.7	197.0	193.9	191.5	191.5
67.5°	169.8	167.8	165.4	162.3	162.3
70°	149.1	148.3	145.9	142.8	142.8
72.5°	130.3	128.9	126.5	123.9	123.9
75°	101.3	100.5	98.1	96.5	95.7
77.5°	72.5	71.9	71.7	69.5	70.1
80°	54.9	54.9	54.1	52.6	52.6
82.5°	39.2	39.8	38.5	38.2	37.5
85°	16.5	18.0	18.8	19.6	19.6
87.5°	3.5	5.6	5.6	6.4	6.6
90°	1.6	3.1	6.3	7.1	7.9
92.5°	14.1	58.8	105.2	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	345.1
100°	72.4	148.6	693.3	698.3	567.4
102.5°	88.1	158.8	707.9	862.7	738.6
105°	113.4	174.9	699.7	1068.2	1005.8
107.5°	140.1	194.9	660.6	1167.2	1189.9
110°	159.0	208.2	630.4	1188.5	1262.3



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	176.0	223.4	602.0	1171.6	1280.6
115°	203.1	245.3	563.5	1115.5	1268.7
117.5°	226.6	268.9	538.1	1036.5	1210.7
120°	242.4	283.9	528.0	983.0	1158.5
122.5°	257.5	297.3	519.9	933.1	1099.3
125°	278.6	317.0	510.7	864.4	1014.4
127.5°	296.6	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	500.3	740.9	847.7
135°	335.2	371.5	496.6	700.1	789.4
137.5°	352.6	385.5	494.7	665.8	742.0
140°	362.1	394.3	493.4	642.9	709.9
142.5°	372.7	402.6	492.2	622.6	681.6
145°	388.8	415.7	490.4	596.0	641.4
147.5°	404.2	427.7	488.6	573.5	608.9
150°	415.6	434.8	488.0	560.2	588.7
152.5°	424.4	442.4	487.3	548.8	572.4
155°	438.3	453.0	486.4	534.8	551.7
157.5°	451.3	462.6	486.5	524.6	536.2
160°	458.8	468.8	487.2	518.8	527.3
162.5°	465.1	473.9	487.8	513.8	520.3
165°	474.5	480.8	488.8	507.7	511.5
167.5°	481.8	485.5	489.6	504.0	505.3
170°	485.6	488.7	489.6	502.1	502.1
172.5°	488.8	490.6	489.6	499.6	499.0
175°	491.8	492.6	489.6	496.6	495.0
177.5°	493.1	492.5	489.4	493.7	492.5
180°	491.8	491.8	491.8	491.8	491.8

(END OF REPORT)