

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: P520176

Luminaire Tested: **SQ4-F-100U-050D-835-1D-UNV-STD-W-4**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P520176  
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-835-1D-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**

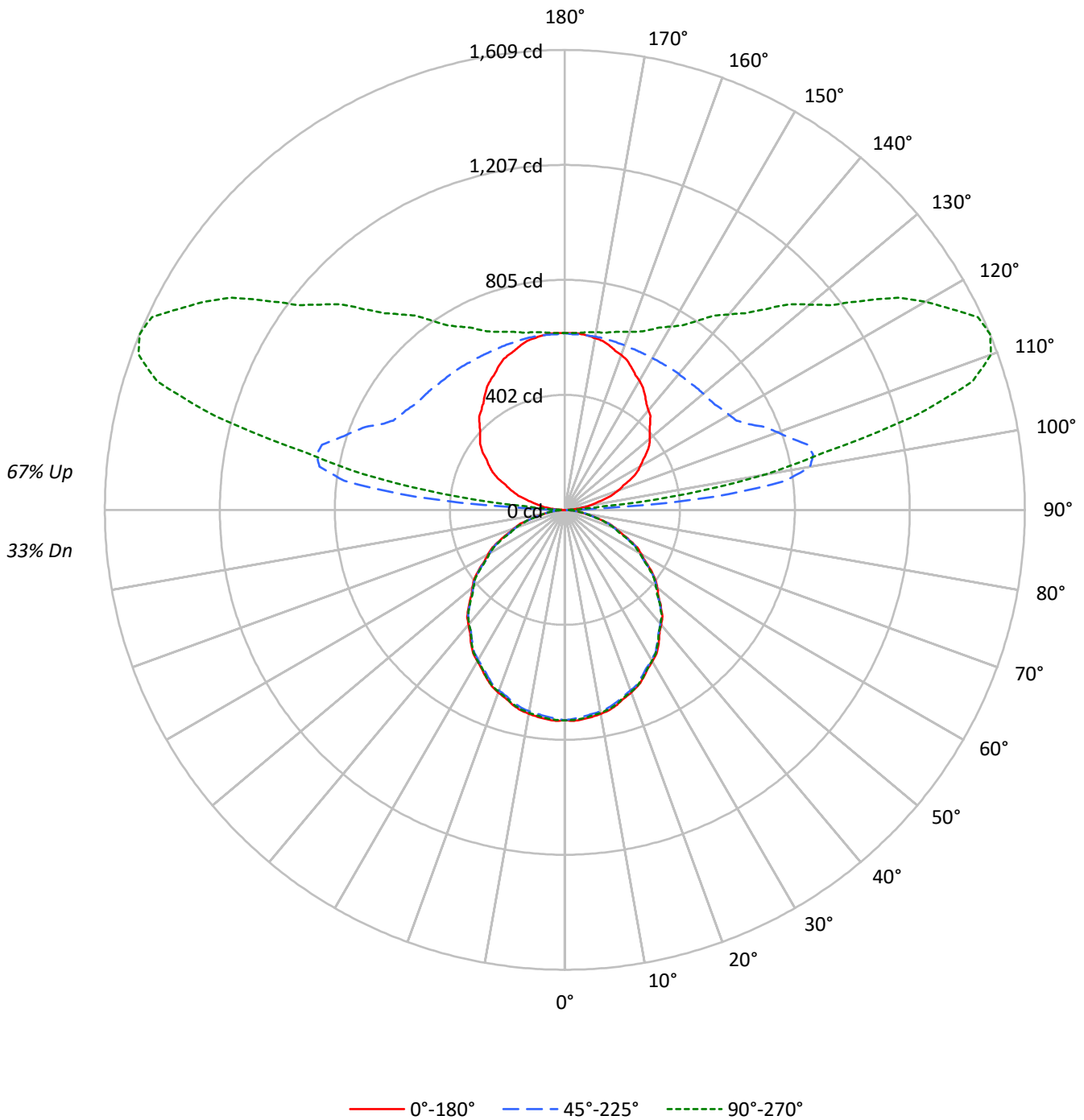
Lumens per Lamp: N/A  
Luminaire Lumens: 6028.0 lumens  
Efficiency: N/A  
Efficacy: 146.0 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35  
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')  
CIE Type: Semi-Indirect

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°	6796	6796	6796
5°	6813	6730	6785
10°	6790	6707	6753
15°	6743	6658	6716
20°	6680	6603	6651
25°	6605	6524	6585
30°	6514	6460	6503
35°	6441	6364	6397
40°	6318	6259	6270
45°	6189	6136	6136
50°	6057	6001	5972
55°	5916	5837	5805
60°	5694	5604	5567
65°	5425	5318	5253
70°	5055	4947	4842
75°	4534	4395	4288
80°	3666	3613	3512
85°	2191	2509	2615



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	69.5	1.2
10°-20°	197.9	3.3
20°-30°	297.3	4.9
30°-40°	354.8	5.9
40°-50°	363.6	6.0
50°-60°	324.3	5.4
60°-70°	241.5	4.0
70°-80°	131.1	2.2
80°-90°	31.6	0.5
90°-100°	289.5	4.8
100°-110°	799.1	13.3
110°-120°	824.2	13.7
120°-130°	662.3	11.0
130°-140°	520.5	8.6
140°-150°	399.2	6.6
150°-160°	286.9	4.8
160°-170°	175.5	2.9
170°-180°	59.2	1.0
0°-30°	564.7	9.4
0°-40°	919.5	15.3
0°-60°	1607.4	26.7
0°-90°	2011.6	33.4
90°-120°	1912.8	31.7
90°-150°	3494.8	58.0
90°-180°	4016.0	66.6
0°-180°	6028.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	737	737	737	737	737	
5°	736	735	727	734	733	70
15°	706	704	697	703	703	199
25°	649	647	641	645	647	299
35°	572	570	565	565	568	357
45°	474	475	470	469	470	366
55°	368	368	363	360	361	328
65°	248	248	244	241	241	246
75°	127	126	123	121	120	134
85°	21	23	24	25	25	29
90°	2	4	8	9	10	4
95°	42	157	525	216	140	45
105°	142	220	879	1342	1264	152
115°	255	308	708	1402	1594	251
125°	350	398	642	1086	1275	312
135°	421	467	624	880	992	326
145°	489	522	616	749	806	306
155°	551	569	611	672	693	254
165°	596	604	614	638	643	168
175°	618	619	615	624	622	59
180°	618	618	618	618	618	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	736.6	736.6	736.6	736.6	736.6
2.5°	739.0	737.4	731.1	736.6	735.8
5°	735.6	734.6	726.7	733.6	732.6
7.5°	730.3	728.3	720.6	727.3	726.3
10°	724.8	722.8	715.9	721.8	720.8
12.5°	717.7	716.5	708.8	714.7	714.5
15°	706.0	704.0	697.1	703.1	703.1
17.5°	690.6	689.5	682.7	688.5	687.7
20°	680.4	678.4	672.5	677.4	677.4
22.5°	667.8	666.6	660.7	664.8	665.6
25°	648.8	646.9	640.9	644.9	646.9
27.5°	627.9	626.3	621.4	624.0	625.4
30°	611.4	611.4	606.4	607.5	610.4
32.5°	596.4	596.4	590.6	591.6	593.0
35°	571.9	569.9	565.0	565.1	568.0
37.5°	543.5	542.5	539.4	538.8	539.6
40°	524.6	523.6	519.7	520.6	520.6
42.5°	505.6	504.7	500.7	499.3	500.9
45°	474.3	475.3	470.3	469.4	470.3
47.5°	443.3	443.3	439.4	436.6	438.2
50°	422.0	422.0	418.1	416.1	416.1
52.5°	399.9	400.7	396.0	393.2	394.0
55°	367.8	367.8	362.9	359.9	360.9
57.5°	332.3	332.3	327.4	324.4	326.2
60°	308.6	308.6	303.7	300.7	301.7
62.5°	285.0	285.0	280.0	277.1	277.3
65°	248.5	247.5	243.6	240.6	240.6
67.5°	213.4	210.9	207.9	203.9	203.9
70°	187.4	186.4	183.4	179.5	179.5
72.5°	163.7	161.9	159.0	155.8	155.8
75°	127.2	126.2	123.3	121.3	120.3
77.5°	91.1	90.3	90.1	87.4	88.2
80°	69.0	69.0	68.0	66.1	66.1
82.5°	49.3	50.1	48.3	47.9	47.1
85°	20.7	22.7	23.7	24.7	24.7
87.5°	4.3	7.0	7.1	8.1	8.3
90°	2.0	4.0	7.9	8.9	9.9
92.5°	17.8	73.9	132.2	48.2	37.6
95°	42.5	156.6	525.2	215.8	140.5
97.5°	70.4	175.5	777.9	599.0	433.8
100°	91.0	186.8	871.3	877.4	713.1
102.5°	110.8	199.5	889.5	1084.2	928.3
105°	142.4	219.8	879.2	1342.3	1263.9
107.5°	176.1	244.9	830.2	1466.8	1495.4
110°	199.8	261.6	792.2	1493.5	1586.4



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	221.2	280.7	756.6	1472.4	1609.4
115°	255.1	308.3	708.2	1401.8	1594.3
117.5°	284.8	337.8	676.3	1302.6	1521.5
120°	304.6	356.8	663.7	1235.3	1455.8
122.5°	323.6	373.5	653.4	1172.6	1381.4
125°	350.1	398.5	641.9	1086.3	1274.8
127.5°	372.6	421.0	635.2	1013.3	1176.0
130°	387.7	436.0	632.0	968.6	1116.6
132.5°	401.9	447.9	628.8	931.2	1065.2
135°	421.3	466.8	624.1	879.8	992.0
137.5°	443.1	484.4	621.7	836.7	932.4
140°	454.9	495.6	620.1	808.0	892.1
142.5°	468.4	505.9	618.6	782.4	856.5
145°	488.6	522.4	616.2	749.0	806.0
147.5°	508.0	537.5	614.0	720.8	765.1
150°	522.2	546.3	613.2	704.0	739.7
152.5°	533.3	555.9	612.4	689.6	719.3
155°	550.9	569.3	611.2	672.0	693.3
157.5°	567.1	581.3	611.4	659.2	673.8
160°	576.6	589.2	612.2	652.0	662.7
162.5°	584.5	595.5	613.0	645.7	654.0
165°	596.4	604.1	614.2	638.0	642.9
167.5°	605.5	610.1	615.2	633.4	635.0
170°	610.2	614.1	615.2	631.0	631.0
172.5°	614.2	616.5	615.2	627.9	627.1
175°	618.2	619.1	615.2	624.0	622.1
177.5°	619.7	619.0	615.0	620.4	619.0
180°	618.2	618.2	618.2	618.2	618.2

(END OF REPORT)