

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: P519984

Luminaire Tested: **SQ4-F-075U-050D-835-1D-UNV-STD-W-4**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P519984  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-22, 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-075U-050D-835-1D-UNV-STD-W-4  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE  
DOWNLIGHT 500 LUMENS PER FOOT  
UPLIGHT 750 LUMENS PER FOOT  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

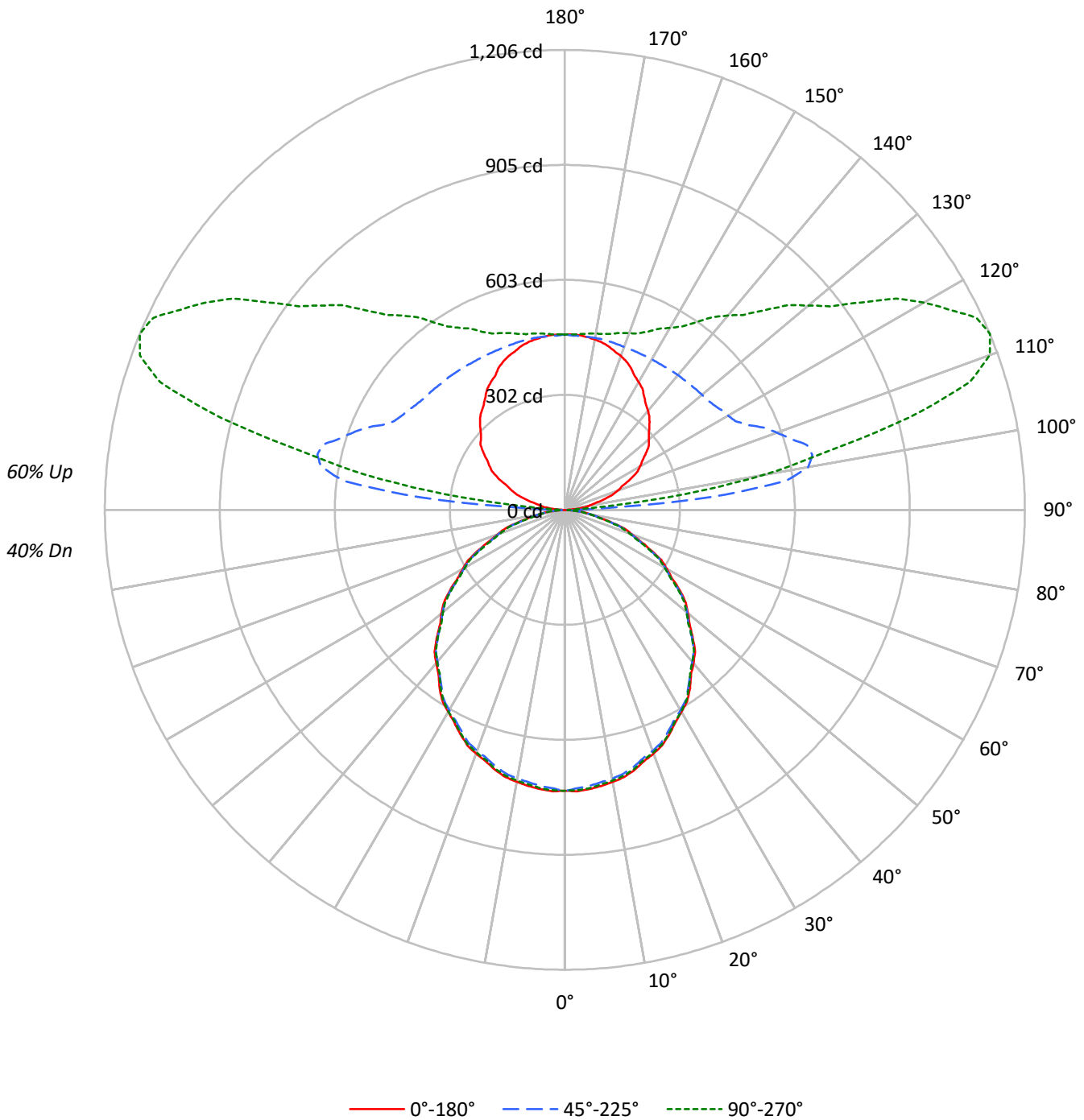
Lumens per Lamp: N/A  
Luminaire Lumens: 5005.3 lumens  
Efficiency: N/A  
Efficacy: 144.2 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35  
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')  
CIE Type: General Diffuse

Input Watts (W): 34.7  
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	50	30	10	0	
RCR																						
0	105	105	105	105	95	95	95	95	78	78	78	62	62	62	47	47	47	40				
1	96	91	87	84	87	83	80	77	68	66	64	54	53	51	42	41	40	34				
2	87	80	74	68	79	73	68	63	60	56	53	48	45	43	37	35	33	28				
3	79	70	63	57	72	64	58	53	53	48	44	42	39	36	32	30	28	24				
4	72	62	54	48	66	56	50	44	47	42	38	37	34	31	29	26	24	20				
5	66	55	47	41	60	50	43	38	42	36	32	33	30	27	26	23	21	18				
6	61	49	41	35	55	45	38	33	37	32	28	30	26	23	23	21	19	15				
7	56	44	36	31	51	41	34	29	34	28	25	27	23	20	21	19	16	14				
8	52	40	32	27	47	37	30	25	31	25	22	25	21	18	20	17	15	12				
9	49	37	29	24	44	34	27	23	28	23	19	23	19	16	18	15	13	11				
10	45	33	26	22	41	31	24	20	26	21	17	21	17	15	17	14	12	10				

**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	1.4
10°-20°	197.9	4.0
20°-30°	297.3	5.9
30°-40°	354.8	7.1
40°-50°	363.6	7.3
50°-60°	324.3	6.5
60°-70°	241.5	4.8
70°-80°	131.1	2.6
80°-90°	31.5	0.6
90°-100°	216.8	4.3
100°-110°	596.3	11.9
110°-120°	615.5	12.3
120°-130°	493.1	9.9
130°-140°	387.3	7.7
140°-150°	296.8	5.9
150°-160°	213.4	4.3
160°-170°	130.5	2.6
170°-180°	44.0	0.9
0°-30°	564.7	11.3
0°-40°	919.5	18.4
0°-60°	1607.4	32.1
0°-90°	2011.5	40.2
90°-120°	1428.6	28.5
90°-150°	2605.9	52.1
90°-180°	2994.0	59.8
0°-180°	5005.3	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°	1	4	7	9	9	3
95°	32	118	383	164	105	34
105°	107	164	657	1001	934	112
115°	189	230	527	1049	1191	186
125°	260	296	478	809	948	232
135°	314	348	464	654	740	242
145°	363	388	458	557	600	227
155°	411	424	455	501	515	189
165°	444	450	457	475	478	125
175°	460	460	458	463	462	44
180°	460	460	460	460	460	

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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°	4.1	7.0	6.9	8.1	8.1
90°	1.0	3.8	6.8	8.8	8.8
92.5°	13.5	57.7	100.0	38.3	31.5
95°	32.3	118.4	383.3	163.9	104.7
97.5°	52.6	131.2	584.9	450.6	318.0
100°	67.5	139.2	648.3	654.4	533.9
102.5°	81.6	148.7	664.7	811.7	701.2
105°	106.6	163.9	657.1	1000.7	933.8
107.5°	130.5	182.8	619.7	1093.2	1113.1
110°	147.6	195.4	591.6	1116.2	1185.1



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	163.2	209.5	563.4	1101.4	1206.2
115°	188.7	229.9	527.0	1049.4	1191.0
117.5°	212.9	250.8	503.9	976.6	1136.6
120°	227.8	264.2	493.8	921.9	1087.3
122.5°	241.1	277.5	486.7	873.9	1030.9
125°	260.1	296.4	478.1	808.8	947.5
127.5°	278.1	312.7	472.4	754.4	876.1
130°	287.5	322.9	469.3	722.1	833.1
132.5°	298.4	333.8	467.0	693.8	793.9
135°	313.9	348.3	464.4	654.2	740.1
137.5°	328.4	360.2	462.3	622.1	693.0
140°	339.3	368.9	461.5	600.9	664.9
142.5°	348.7	376.0	459.9	581.9	636.8
145°	362.8	387.6	457.6	557.3	600.4
147.5°	377.8	399.3	456.4	535.6	570.0
150°	387.2	406.3	455.6	523.7	550.5
152.5°	395.8	413.4	454.8	513.4	535.6
155°	410.6	424.0	454.6	500.9	515.3
157.5°	421.4	432.3	454.6	490.6	500.6
160°	429.2	437.8	454.6	485.1	492.8
162.5°	435.5	442.6	455.4	480.5	486.5
165°	443.9	449.6	456.6	475.3	478.1
167.5°	449.7	454.1	457.6	470.9	471.6
170°	453.7	456.6	457.6	469.3	469.3
172.5°	456.8	458.2	457.6	467.0	466.2
175°	459.5	460.5	457.6	463.4	462.5
177.5°	460.3	460.3	457.2	461.9	460.3
180°	459.5	459.5	459.5	459.5	459.5

(END OF REPORT)