

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

Brand: CORELITE

Report Number: P521398

Luminaire Tested: SQ4-F-050U-050D-92765-1D-UNV-STD-W-4\_5700K

Issue Date: 5-5-2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P521398  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2101-105-51, G2-2101-105-36)  
Test Lab: INNOVATION CENTER  
Issue Date: 5-5-2021  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4-F-050U-050D-92765-1D-UNV-STD-W-4\_5700K  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE  
DOWNLIGHT 500 LUMENS PER FOOT  
UPLIGHT 500 LUMENS PER FOOT  
Light Source: 2700K-6500K CCT, 90 CRI LEDS, TUNED TO 5700K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4528.6 lumens  
Efficiency: N/A  
Efficacy: 124.4 lumens/watt  
Spacing Criteria (0/90/45): 1.27 / 1.26 / 1.38  
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')  
CIE Type: General Diffuse

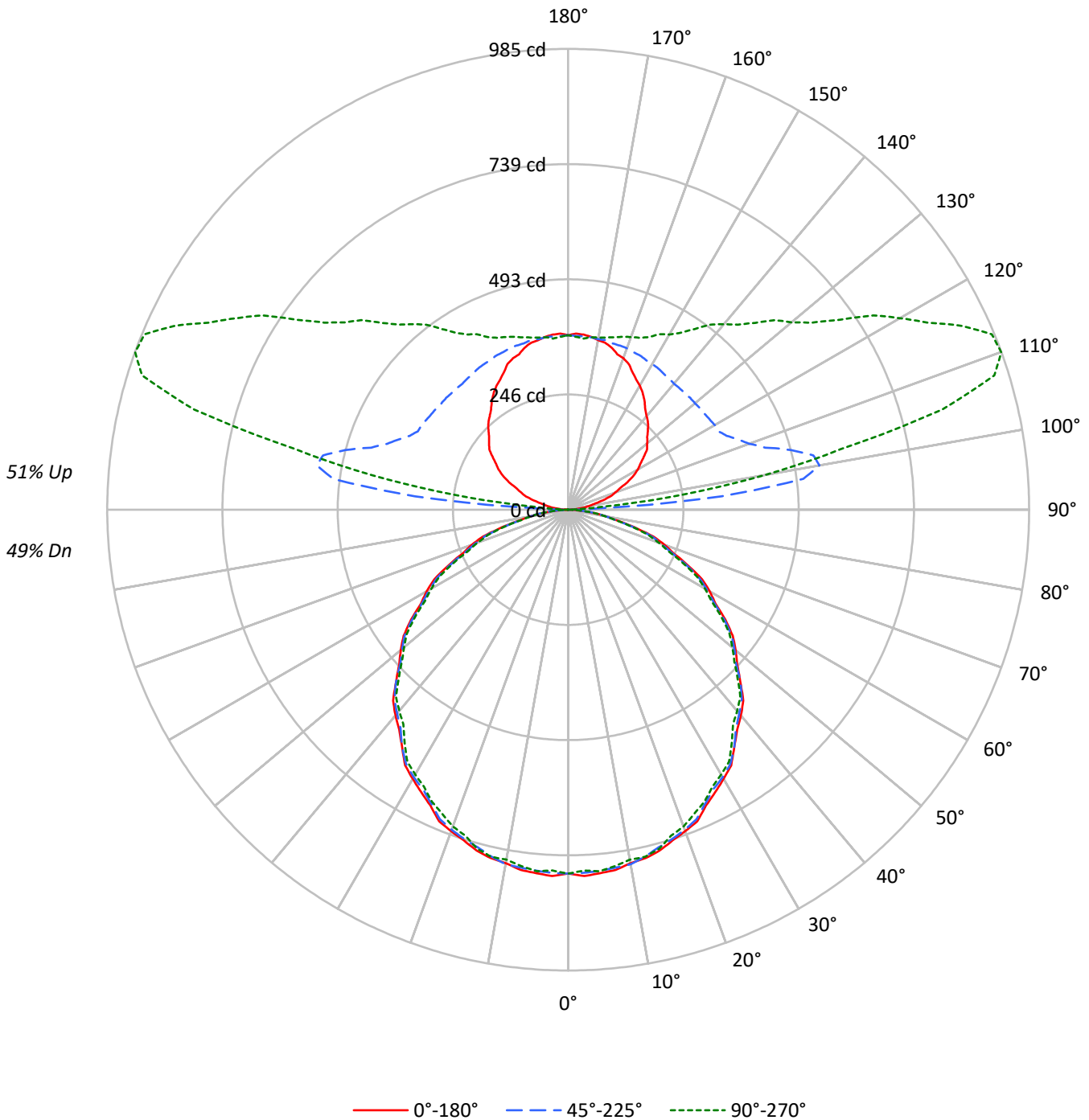
Input Watts (W): 36.4  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Luminous Intensity Polar Plot



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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20									20									20									20										
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	50	30	10	0														
RCR																																						
0	107	107	107	107	98	98	98	98	83	83	83	68	68	68	55	55	55	49																				
1	97	93	89	86	90	86	82	79	72	70	68	60	58	57	48	47	46	41																				
2	89	81	75	70	81	75	69	65	63	59	56	52	50	47	42	40	39	34																				
3	81	71	64	58	74	66	59	54	56	51	47	46	43	40	37	35	33	29																				
4	74	63	55	49	68	58	51	46	49	44	40	41	37	34	33	30	28	24																				
5	68	56	48	42	62	52	44	39	44	38	34	37	32	29	30	27	24	21																				
6	62	50	42	36	57	46	39	34	40	34	30	33	29	25	27	24	21	18																				
7	57	45	37	31	53	42	35	30	36	30	26	30	26	22	25	21	19	16																				
8	53	41	33	28	49	38	31	26	33	27	23	27	23	20	23	19	17	14																				
9	50	37	30	25	46	35	28	23	30	24	21	25	21	18	21	18	15	13																				
10	46	34	27	22	43	32	25	21	27	22	18	23	19	16	19	16	14	12																				

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

	0°	45°	90°
0°	7176	7176	7176
5°	7223	7174	7183
10°	7188	7207	7117
15°	7206	7135	7166
20°	7178	7147	7074
25°	7096	7054	7010
30°	7076	7031	6963
35°	6967	6967	6860
40°	6913	6849	6760
45°	6784	6784	6687
50°	6702	6656	6564
55°	6589	6519	6418
60°	6442	6324	6226
65°	6185	6045	5929
70°	5897	5697	5552
75°	5258	5105	5030
80°	4341	4282	4229
85°	3144	3483	3483

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 6784 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	73.6	1.6
10°-20°	211.0	4.7
20°-30°	318.7	7.0
30°-40°	383.9	8.5
40°-50°	398.0	8.8
50°-60°	360.9	8.0
60°-70°	274.3	6.1
70°-80°	152.7	3.4
80°-90°	39.4	0.9
90°-100°	169.9	3.8
100°-110°	483.4	10.7
110°-120°	463.2	10.2
120°-130°	366.6	8.1
130°-140°	294.2	6.5
140°-150°	230.4	5.1
150°-160°	168.5	3.7
160°-170°	104.4	2.3
170°-180°	35.4	0.8
0°-30°	603.3	13.3
0°-40°	987.2	21.8
0°-60°	1746.1	38.6
0°-90°	2212.6	48.9
90°-120°	1116.5	24.7
90°-150°	2007.7	44.3
90°-180°	2316.0	51.1
0°-180°	4528.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	778	778	778	778	778	
5°	780	770	775	776	776	74
15°	754	747	747	747	750	213
25°	697	692	693	689	689	323
35°	619	612	619	611	609	388
45°	520	517	520	510	512	402
55°	410	408	405	401	399	365
65°	283	282	277	274	272	281
75°	148	145	143	141	141	157
85°	30	32	33	34	33	36
90°	0	0	0	0	0	2
95°	18	73	329	114	70	21
105°	75	114	493	870	827	79
115°	140	169	374	791	929	137
125°	197	218	356	592	707	176
135°	241	261	352	500	565	186
145°	284	299	355	433	471	178
155°	325	332	364	391	407	150
165°	359	360	368	376	381	101
175°	376	374	372	370	367	36
180°	373	373	373	373	373	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	777.8	777.8	777.8	777.8	777.8
2.5°	783.7	775.4	776.9	777.6	771.8
5°	779.9	770.5	774.6	775.6	775.6
7.5°	776.5	769.2	771.8	768.6	768.2
10°	767.2	764.0	769.3	761.8	759.7
12.5°	762.9	758.1	759.1	757.6	759.7
15°	754.4	747.2	747.0	747.1	750.2
17.5°	741.3	731.9	738.1	731.5	730.7
20°	731.1	721.7	727.9	720.5	720.5
22.5°	720.9	709.9	716.0	706.0	703.5
25°	697.1	691.9	692.9	688.6	688.6
27.5°	680.4	668.9	672.7	666.8	667.2
30°	664.2	652.8	660.0	651.5	653.6
32.5°	648.1	640.8	644.7	635.5	639.2
35°	618.6	612.4	618.6	611.1	609.1
37.5°	592.7	586.3	588.3	583.5	578.3
40°	574.0	566.8	568.7	562.3	561.3
42.5°	553.7	548.9	549.2	543.7	544.3
45°	519.9	516.8	519.9	510.4	512.5
47.5°	489.8	486.1	485.8	479.4	481.9
50°	466.9	464.8	463.7	457.3	457.3
52.5°	443.1	441.0	439.9	435.2	434.4
55°	409.6	408.5	405.3	401.0	399.0
57.5°	372.9	370.8	369.0	364.5	362.9
60°	349.1	347.0	342.7	337.4	337.4
62.5°	322.8	320.7	315.6	313.6	310.3
65°	283.3	282.3	276.9	273.7	271.6
67.5°	244.0	240.7	238.3	234.2	232.2
70°	218.6	214.4	211.2	207.9	205.8
72.5°	190.6	187.2	184.0	182.4	179.5
75°	147.5	145.4	143.2	141.1	141.1
77.5°	107.2	106.5	104.4	104.4	103.3
80°	81.7	82.7	80.6	80.6	79.6
82.5°	58.8	59.8	59.4	60.2	59.2
85°	29.7	31.8	32.9	33.9	32.9
87.5°	8.5	11.0	12.7	13.6	13.6
90°	0.0	0.0	0.0	0.0	0.0
92.5°	5.7	30.1	69.8	20.3	15.3
95°	18.4	73.2	328.9	113.8	70.2
97.5°	33.9	85.7	506.5	362.5	248.4
100°	44.7	93.2	545.1	552.1	425.3
102.5°	56.6	101.2	536.6	706.7	596.0
105°	75.1	114.0	492.6	870.2	827.2
107.5°	94.0	128.8	441.3	916.3	954.5
110°	107.0	139.6	411.8	898.6	984.6

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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	119.5	150.4	392.0	856.9	979.5
115°	139.6	168.8	373.6	791.4	929.3
117.5°	157.4	184.7	362.6	719.7	865.8
120°	171.5	194.4	361.5	678.7	818.7
122.5°	182.9	205.8	358.7	642.8	772.8
125°	197.1	218.5	356.5	591.7	707.4
127.5°	212.5	232.6	355.4	561.2	656.5
130°	220.4	240.5	353.7	539.9	623.1
132.5°	229.0	248.5	353.7	523.3	599.8
135°	241.0	261.1	352.3	499.8	564.9
137.5°	252.3	271.9	352.2	479.9	536.2
140°	260.9	281.0	351.6	463.4	517.5
142.5°	270.5	287.3	353.3	450.2	498.7
145°	284.2	298.8	355.1	432.6	471.4
147.5°	296.0	310.2	358.2	414.7	448.3
150°	306.2	315.9	359.4	408.8	432.4
152.5°	314.2	324.4	360.5	400.9	422.8
155°	324.6	332.3	363.6	390.9	406.9
157.5°	337.7	342.3	364.3	386.4	397.8
160°	344.5	348.0	367.2	383.0	392.7
162.5°	348.5	352.5	367.7	380.1	387.6
165°	358.7	360.1	367.9	375.8	381.4
167.5°	365.6	364.4	371.1	374.7	377.0
170°	367.9	367.2	370.0	370.8	373.6
172.5°	373.0	370.6	371.7	369.6	371.9
175°	375.7	373.6	372.1	370.0	367.2
177.5°	376.8	373.5	371.7	369.5	370.0
180°	372.9	372.9	372.9	372.9	372.9

(END OF REPORT)