

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: P853849

Luminaire Tested: SQ2-FB-075U-050D-935-UNV-STD-W-4

Issue Date: 7/12/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P853849  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2104-222-11, G2-2308-131-12)  
Test Lab: INNOVATION CENTER  
Issue Date: 7/12/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ2-FB-075U-050D-935-UNV-STD-W-4  
Description: CORELITE SQ2 SUSPENDED LED LUMINAIRE  
DOWNLIGHT 500 LUMENS PER FOOT  
UPLIGHT 750 LUMENS PER FOOT  
Light Source: -  
Ballast/Driver: -

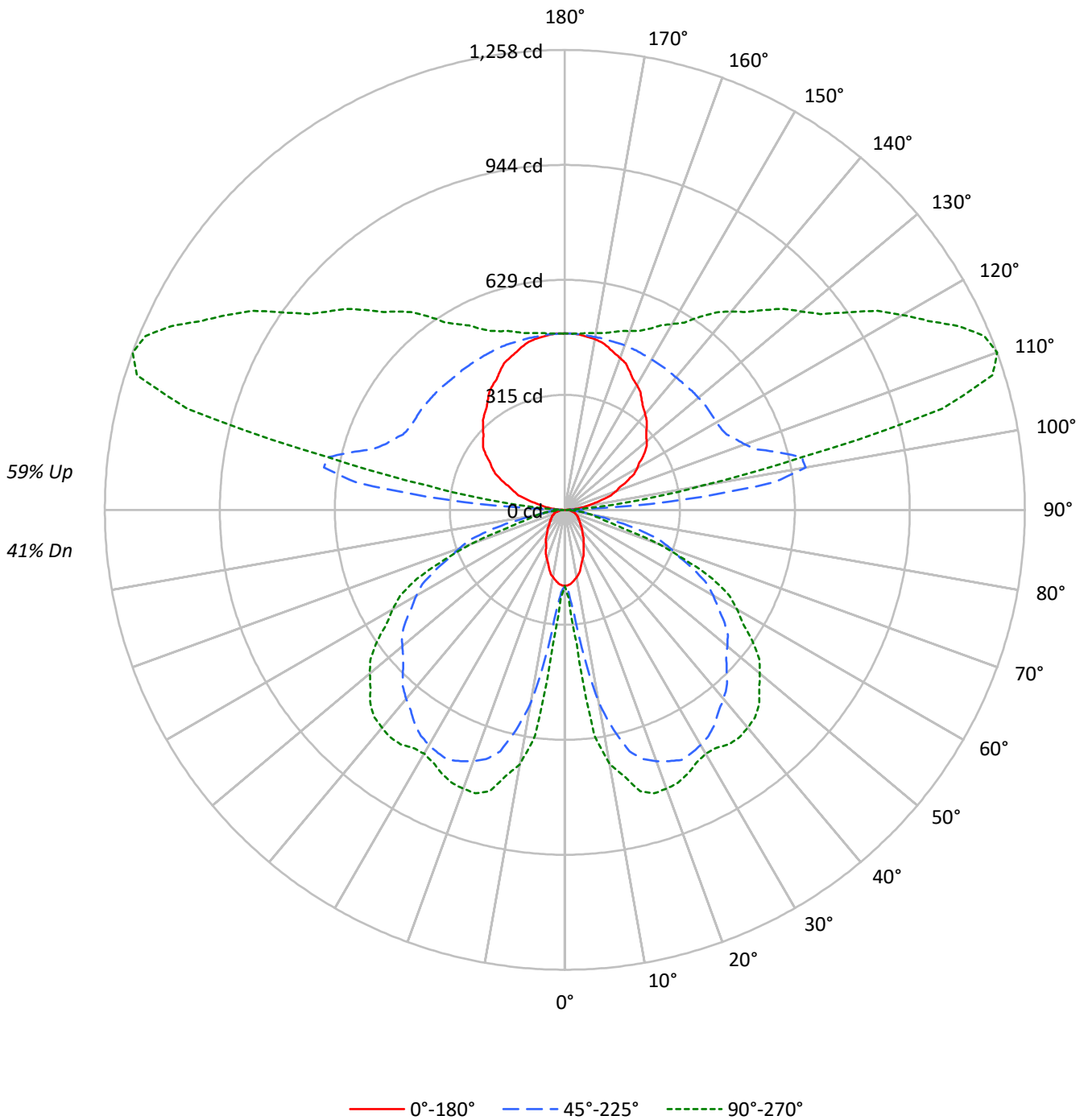
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5045.9 lumens  
Efficiency: N/A  
Efficacy: 122.8 lumens/watt  
Spacing Criteria (0/90/45): 0.84 / 2.98 / 2.56  
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')  
CIE Type: General Diffuse  
  
Input Watts (W): 41.1  
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	96	96	96	96	78	78	78	62	62	62	48	48	48	41				
1	96	91	87	84	87	83	80	77	68	66	64	55	53	52	42	41	40	34				
2	87	79	73	68	79	72	67	63	59	56	52	47	45	43	36	35	33	28				
3	79	69	62	56	71	63	57	52	52	47	43	42	38	35	32	30	28	23				
4	72	61	53	47	65	56	49	43	46	41	37	37	33	30	28	26	23	20				
5	66	54	46	40	59	49	42	37	41	35	31	33	29	26	25	22	20	17				
6	60	48	40	34	55	44	37	32	36	31	27	29	25	22	23	20	17	14				
7	56	43	35	30	50	40	33	27	33	27	23	26	22	19	20	17	15	12				
8	51	39	31	26	47	36	29	24	30	24	20	24	20	17	19	16	13	11				
9	48	35	28	23	43	33	26	21	27	22	18	22	18	15	17	14	12	10				
10	44	32	25	20	40	30	23	19	25	20	16	20	16	13	16	13	11	9				

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

	0°	45°	90°
0°	3358	3358	3358
5°	3274	4538	5948
10°	3066	8788	11575
15°	2775	11433	13322
20°	2457	12577	13952
25°	2173	13450	14181
30°	1920	13852	14356
35°	1715	14093	15433
40°	1560	14227	16398
45°	1439	14294	17171
50°	1356	14569	17482
55°	1323	14947	17622
60°	1356	15145	17534
65°	1414	14938	17039
70°	1463	14445	12888
75°	1622	12976	7112
80°	1674	6695	6602
85°	1667	4631	2779

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 52.5°  
 Luminance: 17781 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	34.8	0.7
10°-20°	159.1	3.2
20°-30°	279.9	5.5
30°-40°	362.3	7.2
40°-50°	399.5	7.9
50°-60°	373.0	7.4
60°-70°	288.3	5.7
70°-80°	133.0	2.6
80°-90°	25.9	0.5
90°-100°	182.6	3.6
100°-110°	605.5	12.0
110°-120°	600.9	11.9
120°-130°	489.5	9.7
130°-140°	397.8	7.9
140°-150°	308.9	6.1
150°-160°	222.6	4.4
160°-170°	136.3	2.7
170°-180°	46.0	0.9
0°-30°	473.8	9.4
0°-40°	836.1	16.6
0°-60°	1608.6	31.9
0°-90°	2055.8	40.7
90°-120°	1389.0	27.5
90°-150°	2585.2	51.2
90°-180°	2990.0	59.3
0°-180°	5045.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	208	208	208	208	208	
5°	202	231	280	342	367	19
15°	166	327	684	766	797	46
25°	122	440	755	788	796	56
35°	87	424	715	740	783	55
45°	63	325	626	719	752	49
55°	47	194	531	610	626	42
65°	37	109	391	438	446	36
75°	26	67	208	112	114	27
85°	9	20	25	17	15	9
90°	0	1	3	4	4	2
95°	26	77	331	118	79	30
105°	106	151	606	1143	1069	112
115°	189	226	488	1016	1188	187
125°	264	293	479	798	941	235
135°	316	348	475	685	773	245
145°	367	394	474	589	645	230
155°	419	434	477	526	546	193
165°	460	465	479	498	503	130
175°	481	481	482	485	484	46
180°	483	483	483	483	483	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	208.0	208.0	208.0	208.0	208.0
2.5°	206.4	215.0	224.8	236.1	240.8
5°	202.0	231.3	280.0	341.6	367.0
7.5°	194.2	253.8	407.2	572.0	622.8
10°	187.0	270.1	536.0	678.6	706.0
12.5°	179.0	291.8	616.8	717.0	745.2
15°	166.0	327.3	684.0	765.7	797.0
17.5°	152.6	367.3	715.2	795.8	812.8
20°	143.0	395.3	732.0	801.3	812.0
22.5°	134.2	416.2	744.0	796.5	808.0
25°	122.0	439.8	755.0	788.2	796.0
27.5°	110.2	446.0	750.2	772.0	779.6
30°	103.0	444.2	743.0	759.3	770.0
32.5°	96.6	439.4	732.6	748.3	771.6
35°	87.0	424.3	715.0	740.0	783.0
37.5°	78.8	400.1	691.8	742.9	784.4
40°	74.0	382.0	675.0	742.8	778.0
42.5°	69.2	360.8	655.8	734.8	770.0
45°	63.0	325.0	626.0	718.8	752.0
47.5°	57.2	284.8	598.4	696.6	720.8
50°	54.0	257.4	580.0	676.4	696.0
52.5°	50.8	230.7	561.6	652.4	670.4
55°	47.0	193.7	531.0	610.4	626.0
57.5°	43.6	161.9	496.2	563.9	576.6
60°	42.0	144.7	469.0	530.3	543.0
62.5°	39.6	129.0	438.6	495.1	507.0
65°	37.0	109.4	391.0	438.2	446.0
67.5°	33.4	94.8	340.4	369.3	354.6
70°	31.0	87.7	306.0	315.0	273.0
72.5°	29.4	79.9	268.4	244.6	165.0
75°	26.0	67.1	208.0	112.0	114.0
77.5°	21.2	51.9	136.8	86.0	87.8
80°	18.0	42.4	72.0	70.0	71.0
82.5°	14.8	33.0	49.6	51.6	50.2
85°	9.0	19.8	25.0	17.0	15.0
87.5°	3.2	7.3	4.6	4.8	4.8
90°	0.0	1.0	3.0	4.0	4.0
92.5°	8.0	30.9	91.0	29.5	24.8
95°	26.0	76.8	331.0	118.1	79.0
97.5°	47.8	101.0	577.7	336.9	213.0
100°	63.0	113.8	668.9	574.5	381.0
102.5°	79.8	129.1	663.3	878.0	663.3
105°	106.0	151.0	605.9	1143.2	1068.9
107.5°	132.8	172.9	550.9	1170.1	1226.6
110°	148.0	188.1	522.9	1143.5	1257.8



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	164.0	203.3	506.1	1096.2	1241.8
115°	189.0	226.1	487.9	1015.8	1187.9
117.5°	213.8	246.8	481.3	939.0	1119.5
120°	229.0	261.2	478.9	890.9	1065.9
122.5°	242.6	274.1	478.9	851.4	1013.1
125°	264.0	293.3	478.9	798.1	940.9
127.5°	281.6	310.3	477.7	757.9	879.9
130°	292.0	322.3	476.9	734.4	843.9
132.5°	301.6	332.7	476.1	715.0	813.5
135°	316.0	348.2	474.9	684.9	772.9
137.5°	331.6	362.6	473.7	655.9	733.5
140°	342.0	372.3	472.9	636.5	707.9
142.5°	351.6	381.1	473.7	617.2	680.7
145°	367.0	394.3	473.9	589.2	644.9
147.5°	383.6	406.4	474.1	565.5	606.9
150°	394.0	414.5	474.9	551.7	586.9
152.5°	403.5	423.3	475.7	540.4	568.5
155°	418.9	433.6	476.9	526.4	545.9
157.5°	433.9	445.3	478.1	516.5	530.3
160°	441.9	451.7	478.9	509.2	519.9
162.5°	449.9	457.4	478.9	504.3	512.7
165°	459.9	464.8	478.9	498.0	502.9
167.5°	469.1	471.7	479.9	492.4	494.9
170°	473.9	474.9	479.9	490.0	490.9
172.5°	477.1	478.1	480.7	487.5	487.7
175°	480.9	480.9	481.9	484.9	483.9
177.5°	482.9	482.9	482.1	483.7	482.1
180°	482.9	482.9	482.9	482.9	482.9

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**CIE UGR TABLE:**

Reflectances:											
Ceiling		0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
Wall		0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
Reference plane		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions		Viewed crosswise					Viewed endwise				
X=2H	Y=2H	10.36	11.16	11.39	12.20	13.60	19.10	19.90	20.12	20.94	22.33
	3H	11.09	11.81	12.12	12.85	14.27	20.71	21.43	21.75	22.48	23.90
	4H	11.38	12.07	12.43	13.12	14.54	20.89	21.58	21.94	22.63	24.05
	6H	11.60	12.23	12.66	13.28	14.71	20.97	21.60	22.03	22.66	24.09
	8H	11.65	12.25	12.72	13.32	14.75	20.98	21.58	22.04	22.65	24.08
	12H	11.68	12.25	12.75	13.31	14.77	20.95	21.52	22.02	22.58	24.03
4H	2H	14.75	15.43	15.81	16.48	17.91	19.53	20.22	20.59	21.27	22.69
	3H	15.68	16.25	16.74	17.33	18.76	21.35	21.92	22.42	23.00	24.43
	4H	15.96	16.48	17.03	17.55	19.01	21.59	22.11	22.66	23.18	24.63
	6H	16.09	16.54	17.17	17.63	19.08	21.73	22.18	22.81	23.27	24.72
	8H	16.11	16.52	17.19	17.61	19.08	21.75	22.17	22.83	23.25	24.72
	12H	16.10	16.47	17.20	17.57	19.04	21.72	22.10	22.82	23.20	24.67
8H	4H	17.13	17.55	18.21	18.63	20.10	21.70	22.12	22.78	23.20	24.67
	6H	17.36	17.71	18.47	18.83	20.30	21.90	22.25	23.01	23.37	24.84
	8H	17.43	17.74	18.55	18.84	20.33	21.96	22.26	23.07	23.37	24.86
	12H	17.46	17.72	18.57	18.83	20.35	21.95	22.22	23.07	23.32	24.85
12H	4H	17.14	17.52	18.24	18.62	20.09	21.65	22.03	22.75	23.12	24.60
	6H	17.46	17.76	18.57	18.87	20.35	21.88	22.19	23.00	23.29	24.78
	8H	17.56	17.82	18.67	18.93	20.45	21.95	22.21	23.06	23.32	24.84