

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: P854124

Luminaire Tested: SQ2-PP3-100U-050D-930-UNV-STD-W-4

Issue Date: 7/12/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P854124  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2104-222-12, G2-2308-131-7)  
Test Lab: INNOVATION CENTER  
Issue Date: 7/12/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ2-PP3-100U-050D-930-UNV-STD-W-4  
Description: CORELITE SQ2 SUSPENDED LED LUMINAIRE  
DOWNLIGHT 500 LUMENS PER FOOT  
UPLIGHT 1000 LUMENS PER FOOT  
Light Source: -  
Ballast/Driver: -

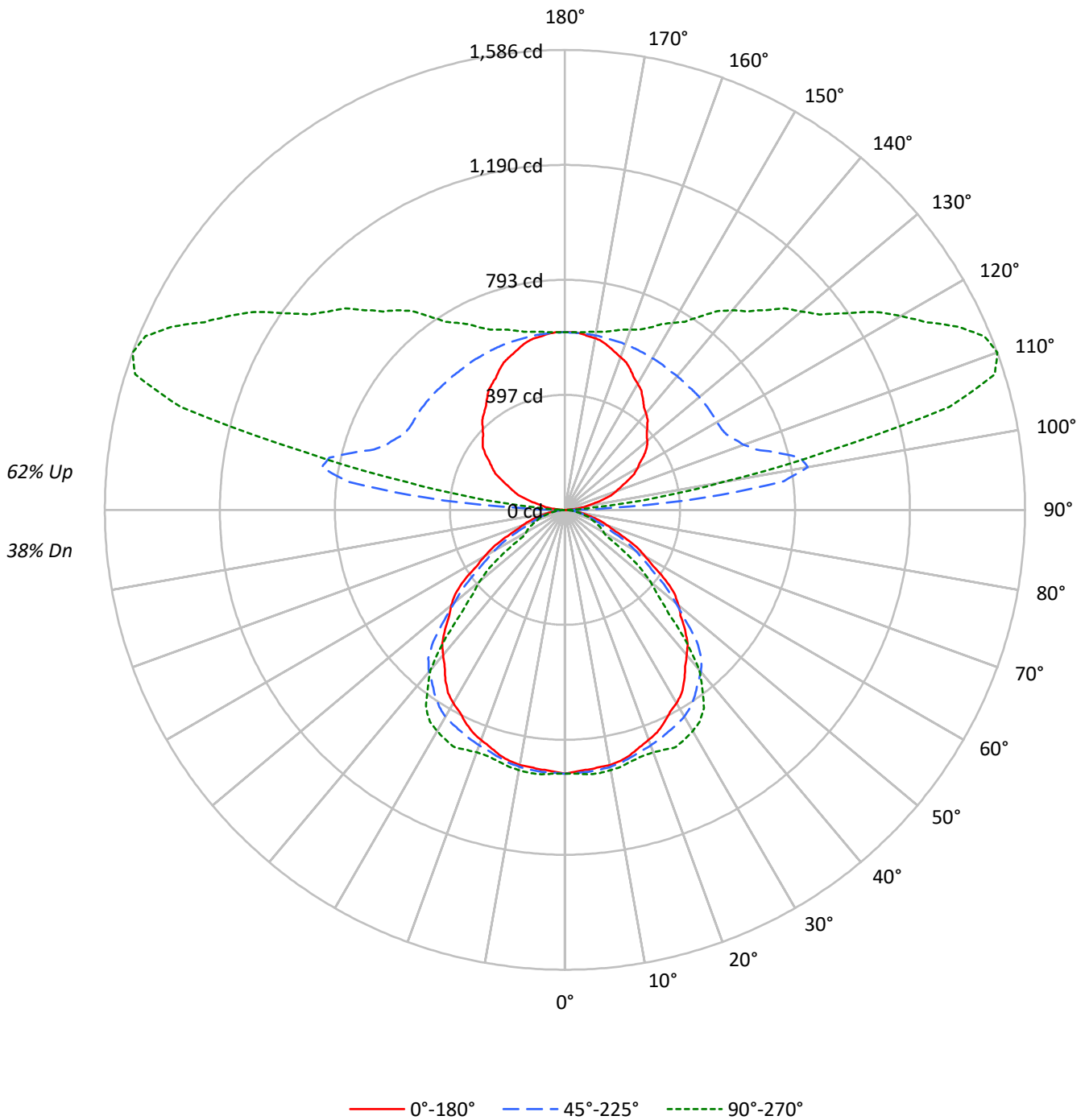
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6104.5 lumens  
Efficiency: N/A  
Efficacy: 121.1 lumens/watt  
Spacing Criteria (0/90/45): 1.26 / 1.41 / 1.4  
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')  
CIE Type: Semi-Indirect  
  
Input Watts (W): 50.4  
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				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	104	104	104	104	94	94	94	94	76	76	76	60	60	60	45	45	45	38
1	95	91	88	84	86	83	80	77	68	65	63	53	52	51	40	39	39	32
2	87	80	74	69	79	73	68	64	60	56	53	47	45	43	36	34	33	28
3	80	71	64	58	72	65	59	54	53	49	45	42	39	37	32	30	28	24
4	73	63	55	49	66	57	51	46	47	42	39	38	34	32	29	27	25	21
5	67	56	48	42	61	51	44	39	42	37	33	34	30	27	26	24	22	18
6	62	50	42	37	56	46	39	34	38	33	29	31	27	24	24	21	19	16
7	57	45	38	32	52	41	35	30	34	29	26	28	24	21	22	19	17	14
8	53	41	33	28	48	38	31	26	31	26	23	25	22	19	20	17	15	13
9	49	37	30	25	45	34	28	24	29	24	20	23	20	17	18	16	14	12
10	46	34	27	23	42	31	25	21	26	22	18	21	18	15	17	14	13	10

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

	0°	45°	90°
0°	14691	14691	14691
5°	14575	14700	14840
10°	14649	14759	14949
15°	14614	14758	14984
20°	14510	14857	15287
25°	14427	15045	16089
30°	14344	15349	16425
35°	14142	15394	16454
40°	13765	15365	15205
45°	13353	14671	11574
50°	12828	12514	9640
55°	11941	10531	6930
60°	10282	9038	4970
65°	8672	6980	4886
70°	7218	5495	4678
75°	6120	4741	4379
80°	5188	4110	3933
85°	4094	3390	2130

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 45°  
 Vertical Angle: 45°  
 Luminance: 14671 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	86.6	1.4
10°-20°	250.7	4.1
20°-30°	392.8	6.4
30°-40°	484.6	7.9
40°-50°	456.2	7.5
50°-60°	323.0	5.3
60°-70°	184.0	3.0
70°-80°	91.1	1.5
80°-90°	23.4	0.4
90°-100°	255.8	4.2
100°-110°	773.7	12.7
110°-120°	755.2	12.4
120°-130°	617.2	10.1
130°-140°	503.8	8.3
140°-150°	392.2	6.4
150°-160°	282.7	4.6
160°-170°	173.1	2.8
170°-180°	58.4	1.0
0°-30°	730.2	12.0
0°-40°	1214.8	19.9
0°-60°	1994.0	32.7
0°-90°	2292.5	37.6
90°-120°	1784.7	29.2
90°-150°	3297.8	54.0
90°-180°	3812.0	62.4
0°-180°	6104.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	910	910	910	910	910	
5°	899	915	907	909	916	86
15°	874	886	883	892	896	246
25°	810	830	844	879	903	373
35°	718	737	781	825	835	447
45°	585	629	642	544	507	450
55°	424	450	374	282	246	374
65°	227	239	183	129	128	228
75°	98	108	76	71	70	106
85°	22	20	18	14	12	26
90°	0	2	12	7	6	2
95°	32	100	483	178	112	38
105°	135	189	760	1443	1371	141
115°	239	286	614	1271	1493	237
125°	335	371	606	1004	1182	297
135°	401	443	602	866	974	310
145°	468	503	602	745	814	293
155°	534	552	606	668	693	246
165°	584	590	609	632	639	164
175°	611	611	612	616	614	58
180°	612	612	612	612	612	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	909.9	909.9	909.9	909.9	909.9
2.5°	902.9	915.7	907.6	909.1	910.6
5°	899.3	915.3	907.0	909.1	915.6
7.5°	895.8	912.2	904.1	907.6	915.6
10°	893.5	907.6	900.2	905.2	911.8
12.5°	886.6	899.9	893.3	899.8	905.6
15°	874.3	886.5	882.9	891.7	896.4
17.5°	857.5	872.4	872.4	884.8	889.7
20°	844.5	862.3	864.7	880.3	889.7
22.5°	830.6	851.5	855.4	878.9	895.1
25°	809.8	830.5	844.5	878.7	903.1
27.5°	785.6	806.1	834.8	873.2	892.6
30°	769.4	789.2	823.3	863.1	881.0
32.5°	749.4	769.9	806.4	849.3	865.6
35°	717.5	737.3	781.0	825.4	834.8
37.5°	680.8	703.1	752.1	777.0	777.5
40°	653.1	682.2	729.0	733.6	721.4
42.5°	626.1	663.6	696.7	676.5	622.1
45°	584.8	629.0	642.5	544.5	506.9
47.5°	540.7	584.4	562.8	456.7	430.7
50°	510.7	552.1	498.2	408.2	383.8
52.5°	476.9	513.7	440.5	361.8	324.5
55°	424.2	449.5	374.1	282.0	246.2
57.5°	360.7	378.5	319.9	211.6	171.6
60°	318.4	332.5	279.9	173.6	153.9
62.5°	279.9	292.5	238.3	150.8	143.9
65°	227.0	239.2	182.7	128.9	127.9
67.5°	180.6	194.0	140.2	112.5	111.4
70°	152.9	167.0	116.4	100.9	99.1
72.5°	129.8	143.2	98.7	88.7	87.5
75°	98.1	108.4	76.0	71.2	70.2
77.5°	71.2	77.8	56.6	54.0	53.1
80°	55.8	58.6	44.2	43.3	42.3
82.5°	41.9	41.0	33.5	32.5	30.8
85°	22.1	20.2	18.3	14.4	11.5
87.5°	6.9	7.3	5.4	3.7	3.5
90°	0.0	1.9	11.5	6.7	5.8
92.5°	10.8	43.5	156.2	51.8	37.3
95°	31.7	100.4	482.7	178.3	112.5
97.5°	61.3	127.7	760.8	503.4	306.5
100°	79.8	144.7	850.0	821.8	551.9
102.5°	100.6	163.2	831.5	1152.6	918.8
105°	134.6	189.1	759.6	1442.6	1371.2
107.5°	166.9	219.0	690.4	1471.3	1554.0
110°	188.5	238.3	655.8	1435.2	1585.6



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	209.2	257.6	635.0	1374.5	1564.8
115°	239.4	285.5	614.4	1271.4	1493.3
117.5°	269.4	313.0	607.1	1174.8	1401.9
120°	289.4	330.8	604.8	1118.4	1336.5
122.5°	307.9	347.0	604.8	1068.8	1270.4
125°	334.6	371.3	605.8	1004.0	1181.7
127.5°	356.3	394.3	604.8	955.2	1106.7
130°	370.2	409.7	604.8	927.2	1064.4
132.5°	382.5	422.7	604.0	901.5	1028.3
135°	401.0	443.3	601.9	865.9	974.0
137.5°	421.5	461.8	601.9	827.9	928.1
140°	434.6	474.1	601.9	803.1	898.1
142.5°	447.7	485.7	601.2	780.5	863.5
145°	468.3	503.1	601.9	744.9	814.4
147.5°	488.8	518.4	603.1	715.4	768.8
150°	501.9	529.2	603.8	699.1	744.2
152.5°	514.2	538.5	604.6	685.1	721.9
155°	533.7	551.5	605.8	667.9	693.3
157.5°	550.6	565.1	606.9	655.2	672.9
160°	560.6	572.8	607.7	647.4	660.6
162.5°	570.6	579.8	608.5	640.4	651.3
165°	583.7	590.2	608.7	631.9	639.4
167.5°	594.8	598.2	609.8	625.3	628.5
170°	601.0	602.8	610.6	622.1	623.1
172.5°	604.8	605.9	610.6	619.0	619.2
175°	610.6	610.6	611.5	616.3	614.4
177.5°	613.3	612.5	611.7	614.0	612.5
180°	612.5	612.5	612.5	612.5	612.5

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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	15.59	16.33	16.66	17.39	18.83	11.99	12.73	13.05	13.79	15.23
	3H	16.68	17.34	17.75	18.41	19.87	13.08	13.74	14.16	14.81	16.27
	4H	17.02	17.64	18.10	18.71	20.18	13.54	14.16	14.62	15.24	16.70
	6H	17.22	17.80	18.32	18.87	20.35	13.88	14.45	14.97	15.53	17.01
	8H	17.27	17.82	18.37	18.91	20.38	13.96	14.51	15.06	15.60	17.07
	12H	17.28	17.80	18.38	18.88	20.38	13.97	14.49	15.07	15.58	17.07
4H	2H	15.69	16.31	16.78	17.38	18.85	12.69	13.31	13.78	14.38	15.85
	3H	16.98	17.50	18.08	18.60	20.08	13.93	14.44	15.02	15.54	17.02
	4H	17.45	17.93	18.55	19.02	20.52	14.48	14.95	15.58	16.04	17.54
	6H	17.78	18.19	18.89	19.30	20.79	14.91	15.32	16.02	16.43	17.92
	8H	17.87	18.25	18.98	19.36	20.87	15.03	15.41	16.14	16.51	18.02
	12H	17.90	18.25	19.03	19.36	20.88	15.05	15.39	16.18	16.51	18.03
8H	4H	17.46	17.84	18.57	18.94	20.45	14.74	15.12	15.85	16.22	17.73
	6H	17.89	18.20	19.02	19.35	20.85	15.28	15.59	16.41	16.74	18.25
	8H	18.04	18.32	19.18	19.45	20.97	15.47	15.74	16.61	16.87	18.39
	12H	18.13	18.37	19.27	19.49	21.05	15.54	15.78	16.68	16.90	18.46
12H	4H	17.41	17.76	18.54	18.87	20.39	14.74	15.09	15.87	16.20	17.72
	6H	17.88	18.15	19.01	19.28	20.80	15.33	15.61	16.47	16.74	18.26
	8H	18.04	18.28	19.18	19.41	20.97	15.54	15.78	16.68	16.90	18.47