

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: P853707

Luminaire Tested: SQ2-F-100U-075D-930-UNV-STD-W-4

Issue Date: 7/12/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P853707  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2104-222-12, G2-2308-131-13)  
Test Lab: INNOVATION CENTER  
Issue Date: 7/12/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ2-F-100U-075D-930-UNV-STD-W-4  
Description: CORELITE SQ2 SUSPENDED LED LUMINAIRE  
DOWNLIGHT 750 LUMENS PER FOOT  
UPLIGHT 1000 LUMENS PER FOOT  
Light Source: -  
Ballast/Driver: -

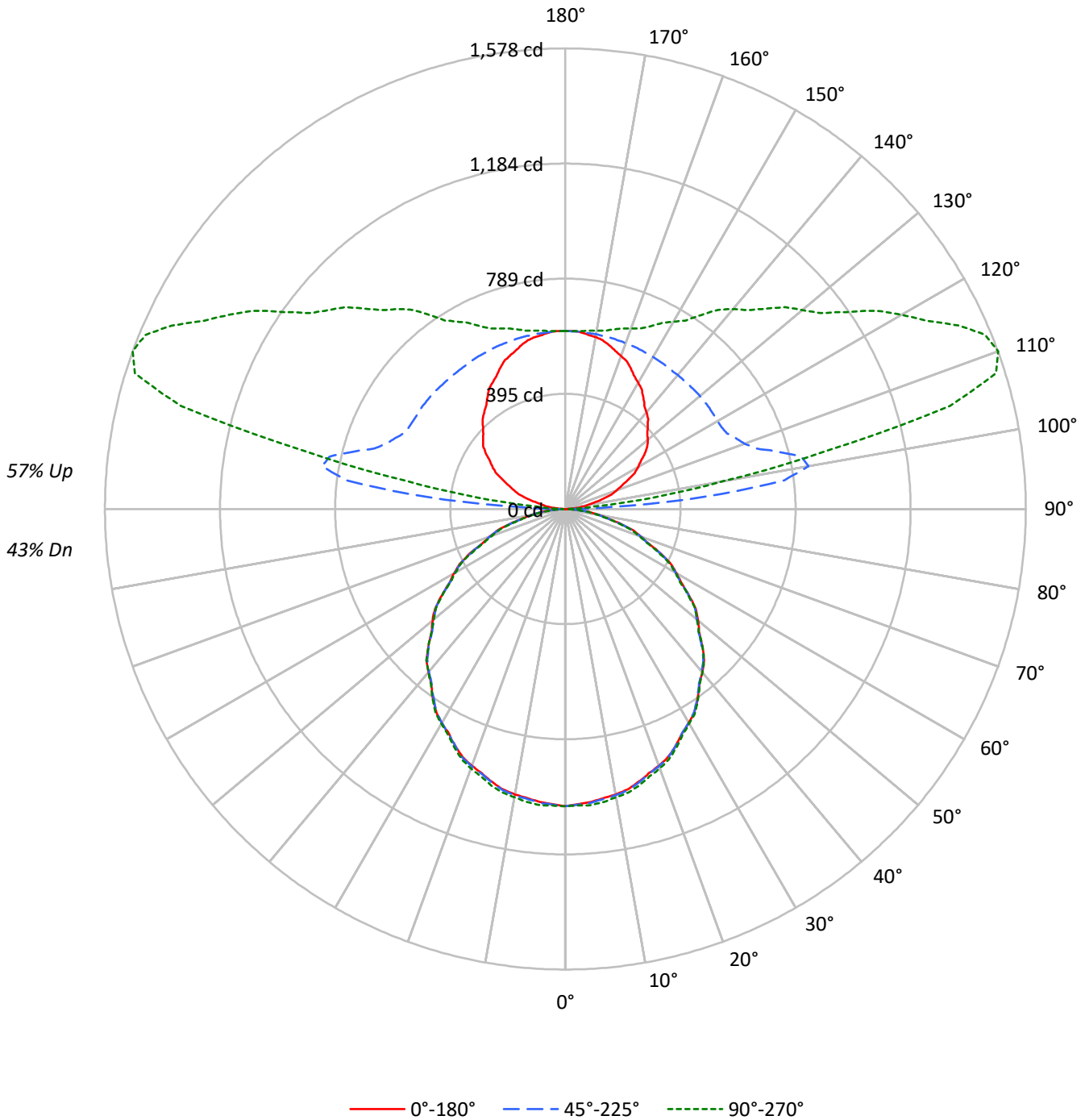
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6654.5 lumens  
Efficiency: N/A  
Efficacy: 112.2 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.25 / 1.36  
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')  
CIE Type: General Diffuse  
  
Input Watts (W): 59.3  
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

TEST NUMBER: P853707

CATALOG NUMBER: SQ2-F-100U-075D-930-UNV-STD-W-4

### Luminous Intensity Polar Plot





TEST NUMBER: P853707

CATALOG NUMBER: SQ2-F-100U-075D-930-UNV-STD-W-4

**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	79	79	79	64	64	64	50	50	50	43				
1	96	92	88	84	88	84	81	78	69	67	65	56	54	53	44	43	42	36				
2	87	80	74	69	80	73	68	63	61	57	53	49	46	44	38	36	35	30				
3	80	70	63	57	72	64	58	53	53	49	45	43	40	37	34	31	30	25				
4	73	62	54	48	66	57	50	45	47	42	38	38	35	32	30	27	25	21				
5	67	55	47	41	61	51	43	38	42	37	33	34	30	27	27	24	22	19				
6	61	49	41	35	56	45	38	33	38	32	28	31	27	24	24	22	19	16				
7	57	44	36	31	52	41	34	29	34	29	25	28	24	21	22	19	17	14				
8	52	40	33	27	48	37	30	25	31	26	22	26	22	19	20	17	15	13				
9	49	37	29	24	45	34	27	23	29	23	20	24	20	17	19	16	14	11				
10	46	34	26	22	42	31	25	20	26	21	18	22	18	15	17	15	12	10				

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

	0°	45°	90°
0°	16443	16443	16443
5°	16326	16371	16506
10°	16287	16333	16446
15°	16187	16234	16396
20°	16091	16115	16258
25°	15943	15943	16042
30°	15778	15778	15830
35°	15589	15534	15642
40°	15382	15323	15382
45°	15143	15079	15143
50°	14915	14777	14812
55°	14567	14528	14452
60°	14202	14111	14024
65°	13780	13624	13463
70°	12968	12902	12642
75°	12202	11946	11597
80°	10832	10581	10191
85°	8744	7966	7447

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 22.5°  
 Vertical Angle: 45°  
 Luminance: 15237 cd/sqm



TEST NUMBER: P853707

CATALOG NUMBER: SQ2-F-100U-075D-930-UNV-STD-W-4

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	96.3	1.4
10°-20°	275.1	4.1
20°-30°	413.8	6.2
30°-40°	495.2	7.4
40°-50°	510.9	7.7
50°-60°	460.9	6.9
60°-70°	351.7	5.3
70°-80°	202.2	3.0
80°-90°	53.9	0.8
90°-100°	254.6	3.8
100°-110°	770.1	11.6
110°-120°	751.8	11.3
120°-130°	614.3	9.2
130°-140°	501.5	7.5
140°-150°	390.4	5.9
150°-160°	281.4	4.2
160°-170°	172.3	2.6
170°-180°	58.2	0.9
0°-30°	785.2	11.8
0°-40°	1280.3	19.2
0°-60°	2252.1	33.8
0°-90°	2859.9	43.0
90°-120°	1776.6	26.7
90°-150°	3282.7	49.3
90°-180°	3795.0	57.0
0°-180°	6654.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1018	1018	1018	1018	1018	
5°	1007	1021	1010	1012	1018	96
15°	968	981	971	976	981	273
25°	895	904	895	896	900	412
35°	791	796	788	791	794	495
45°	663	667	660	662	663	512
55°	518	520	516	513	513	463
65°	361	359	357	354	352	355
75°	196	194	192	187	186	206
85°	47	44	43	39	40	55
90°	0	2	12	7	6	3
95°	32	100	480	178	112	37
105°	134	188	756	1436	1365	141
115°	238	284	612	1266	1486	236
125°	333	370	603	1000	1176	296
135°	399	441	599	862	970	309
145°	466	501	599	742	811	292
155°	531	549	603	665	690	244
165°	581	588	606	629	636	164
175°	608	608	609	614	612	58
180°	610	610	610	610	610	



TEST NUMBER: P853707

CATALOG NUMBER: SQ2-F-100U-075D-930-UNV-STD-W-4

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1018.4	1018.4	1018.4	1018.4	1018.4
2.5°	1011.7	1023.7	1014.0	1016.2	1017.3
5°	1007.3	1020.9	1010.1	1011.6	1018.4
7.5°	999.0	1013.6	1001.7	1004.4	1012.0
10°	993.4	1007.0	996.2	997.7	1003.1
12.5°	984.5	998.1	987.3	989.9	995.4
15°	968.4	980.7	971.2	975.5	980.9
17.5°	949.9	962.9	952.4	956.1	960.7
20°	936.5	947.4	937.9	939.5	946.2
22.5°	919.9	930.7	922.4	922.8	928.5
25°	894.9	904.4	894.9	896.4	900.5
27.5°	866.3	874.5	866.3	867.8	871.3
30°	846.3	854.5	846.3	847.8	849.1
32.5°	824.2	831.2	823.0	824.5	828.0
35°	790.9	796.3	788.1	790.9	793.6
37.5°	755.3	759.4	752.6	754.0	756.4
40°	729.8	733.9	727.0	728.4	729.8
42.5°	704.3	707.3	700.4	701.8	704.3
45°	663.2	667.3	660.4	661.8	663.2
47.5°	621.6	624.0	618.3	617.2	619.6
50°	593.8	595.2	588.3	588.3	589.7
52.5°	563.9	565.2	560.5	558.3	559.7
55°	517.5	520.2	516.1	513.4	513.4
57.5°	470.9	473.3	468.1	466.7	466.5
60°	439.8	441.2	437.0	435.6	434.3
62.5°	408.7	409.0	404.9	403.4	402.1
65°	360.7	359.4	356.6	353.8	352.4
67.5°	306.9	308.3	305.5	301.1	301.1
70°	274.7	276.1	273.3	267.8	267.8
72.5°	243.6	242.8	241.1	236.7	234.5
75°	195.6	194.3	191.5	187.3	185.9
77.5°	147.6	146.3	144.9	139.6	140.7
80°	116.5	115.2	113.8	109.6	109.6
82.5°	88.8	86.4	84.9	80.8	80.8
85°	47.2	44.5	43.0	38.9	40.2
87.5°	13.3	12.6	13.4	10.2	10.0
90°	0.0	1.9	11.5	6.7	5.7
92.5°	10.7	43.3	155.4	51.6	37.1
95°	31.6	99.9	480.5	177.5	112.0
97.5°	61.1	127.1	757.3	501.1	305.1
100°	79.4	144.0	846.1	818.0	549.4
102.5°	100.1	162.4	827.8	1147.3	914.7
105°	134.0	188.3	756.2	1436.0	1364.9
107.5°	166.2	218.0	687.2	1464.6	1547.0
110°	187.6	237.2	652.8	1428.6	1578.4



TEST NUMBER: P853707

CATALOG NUMBER: SQ2-F-100U-075D-930-UNV-STD-W-4

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	208.3	256.4	632.1	1368.3	1557.7
115°	238.3	284.2	611.6	1265.6	1486.5
117.5°	268.2	311.6	604.4	1169.4	1395.5
120°	288.1	329.3	602.1	1113.3	1330.5
122.5°	306.5	345.4	602.1	1063.9	1264.6
125°	333.1	369.6	603.0	999.5	1176.3
127.5°	354.7	392.5	602.1	950.8	1101.7
130°	368.5	407.8	602.1	922.9	1059.6
132.5°	380.8	420.8	601.3	897.4	1023.6
135°	399.1	441.3	599.2	862.0	969.6
137.5°	419.6	459.7	599.2	824.1	923.8
140°	432.6	471.9	599.2	799.5	894.0
142.5°	445.7	483.5	598.4	777.0	859.5
145°	466.1	500.8	599.2	741.5	810.7
147.5°	486.6	516.0	600.3	712.2	765.3
150°	499.6	526.8	601.1	695.9	740.8
152.5°	511.9	536.0	601.9	681.9	718.6
155°	531.2	549.0	603.0	664.8	690.1
157.5°	548.1	562.5	604.2	652.2	669.8
160°	558.0	570.2	604.9	644.5	657.6
162.5°	568.0	577.1	605.7	637.5	648.4
165°	581.0	587.5	605.9	629.0	636.5
167.5°	592.1	595.5	607.0	622.4	625.6
170°	598.2	600.1	607.8	619.3	620.2
172.5°	602.1	603.2	607.8	616.2	616.4
175°	607.8	607.8	608.8	613.5	611.6
177.5°	610.5	609.7	608.9	611.2	609.7
180°	609.7	609.7	609.7	609.7	609.7

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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	17.01	17.82	18.03	18.85	20.21	16.93	17.74	17.95	18.77	20.14
	3H	18.79	19.52	19.81	20.55	21.94	18.67	19.40	19.69	20.43	21.82
	4H	19.45	20.13	20.48	21.17	22.56	19.29	19.98	20.33	21.02	22.41
	6H	19.91	20.55	20.96	21.59	22.99	19.73	20.36	20.77	21.40	22.81
	8H	20.05	20.65	21.10	21.71	23.11	19.85	20.45	20.90	21.51	22.91
	12H	20.12	20.70	21.18	21.75	23.17	19.90	20.47	20.95	21.52	22.95
4H	2H	17.56	18.25	18.60	19.28	20.68	17.50	18.18	18.54	19.22	20.61
	3H	19.54	20.12	20.59	21.18	22.59	19.43	20.01	20.48	21.07	22.48
	4H	20.33	20.86	21.38	21.91	23.34	20.18	20.71	21.24	21.77	23.20
	6H	20.91	21.37	21.98	22.45	23.87	20.73	21.19	21.80	22.27	23.69
	8H	21.10	21.52	22.17	22.59	24.04	20.90	21.32	21.97	22.39	23.83
	12H	21.20	21.58	22.29	22.67	24.11	20.97	21.36	22.06	22.44	23.89
8H	4H	20.57	20.99	21.64	22.07	23.51	20.44	20.87	21.51	21.94	23.38
	6H	21.29	21.64	22.38	22.75	24.19	21.12	21.47	22.21	22.58	24.02
	8H	21.55	21.86	22.65	22.96	24.41	21.36	21.67	22.46	22.76	24.22
	12H	21.72	21.99	22.82	23.08	24.58	21.49	21.76	22.59	22.85	24.35
12H	4H	20.56	20.95	21.65	22.03	23.48	20.44	20.82	21.53	21.91	23.35
	6H	21.33	21.64	22.43	22.73	24.19	21.17	21.48	22.27	22.57	24.03
	8H	21.62	21.89	22.72	22.98	24.48	21.43	21.70	22.53	22.79	24.29