

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: P854125

Luminaire Tested: SQ2-PP3-100U-050D-935-UNV-STD-W-4

Issue Date: 7/12/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P854125  
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-935-UNV-STD-W-4  
Description: CORELITE SQ2 SUSPENDED LED LUMINAIRE  
DOWNLIGHT 500 LUMENS PER FOOT  
UPLIGHT 1000 LUMENS PER FOOT  
Light Source: -  
Ballast/Driver: -

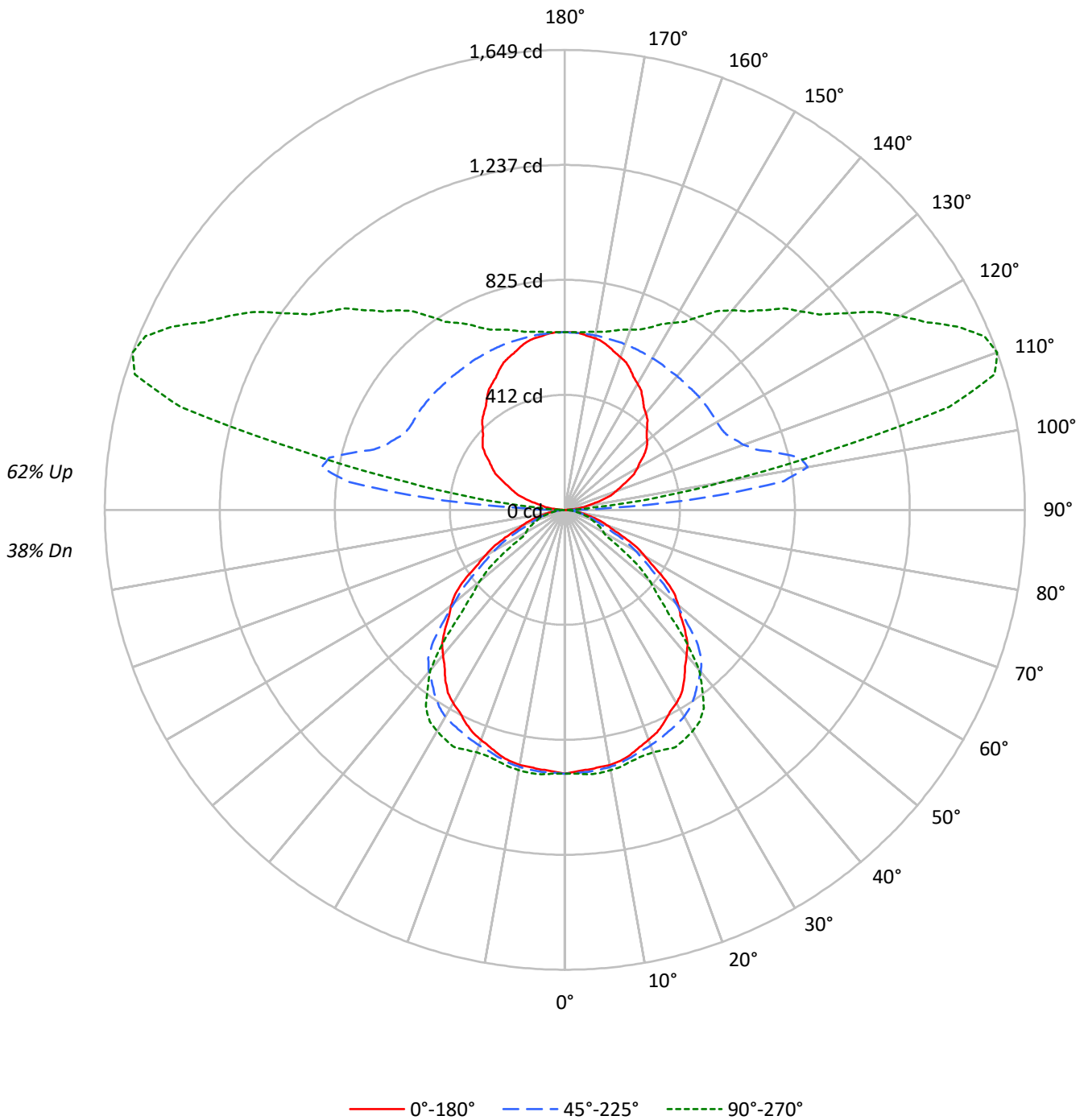
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6346.9 lumens  
Efficiency: N/A  
Efficacy: 125.9 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	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°	15274	15274	15274
5°	15154	15284	15430
10°	15231	15346	15542
15°	15194	15345	15579
20°	15086	15447	15893
25°	15000	15642	16728
30°	14915	15959	17078
35°	14704	16005	17109
40°	14311	15976	15808
45°	13883	15253	12033
50°	13338	13011	10022
55°	12414	10950	7206
60°	10689	9397	5167
65°	9016	7259	5081
70°	7506	5712	4862
75°	6363	4928	4554
80°	5393	4277	4091
85°	4261	3520	2223

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 45°  
 Vertical Angle: 45°  
 Luminance: 15253 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	90.1	1.4
10°-20°	260.7	4.1
20°-30°	408.4	6.4
30°-40°	503.8	7.9
40°-50°	474.4	7.5
50°-60°	335.9	5.3
60°-70°	191.4	3.0
70°-80°	94.7	1.5
80°-90°	24.3	0.4
90°-100°	266.0	4.2
100°-110°	804.4	12.7
110°-120°	785.2	12.4
120°-130°	641.7	10.1
130°-140°	523.8	8.3
140°-150°	407.7	6.4
150°-160°	293.9	4.6
160°-170°	179.9	2.8
170°-180°	60.8	1.0
0°-30°	759.2	12.0
0°-40°	1263.0	19.9
0°-60°	2073.2	32.7
0°-90°	2383.6	37.6
90°-120°	1855.6	29.2
90°-150°	3428.7	54.0
90°-180°	3963.0	62.4
0°-180°	6346.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	946	946	946	946	946	
5°	935	952	943	945	952	89
15°	909	922	918	927	932	256
25°	842	864	878	914	939	388
35°	746	766	812	858	868	465
45°	608	654	668	566	527	468
55°	441	467	389	293	256	389
65°	236	249	190	134	133	237
75°	102	113	79	74	73	111
85°	23	21	19	15	12	27
90°	0	2	12	7	6	3
95°	33	104	502	185	117	39
105°	140	197	790	1500	1426	147
115°	249	297	639	1322	1553	246
125°	348	386	630	1044	1229	309
135°	417	461	626	900	1013	323
145°	487	523	626	774	847	305
155°	555	573	630	694	721	255
165°	607	614	633	657	665	171
175°	635	635	636	641	639	60
180°	637	637	637	637	637	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	946.0	946.0	946.0	946.0	946.0
2.5°	938.8	952.1	943.6	945.2	946.8
5°	935.0	951.6	943.0	945.2	952.0
7.5°	931.4	948.4	940.0	943.6	952.0
10°	929.0	943.7	936.0	941.2	948.0
12.5°	921.8	935.7	928.8	935.5	941.6
15°	909.0	921.7	918.0	927.1	932.0
17.5°	891.6	907.1	907.0	919.9	925.0
20°	878.0	896.6	899.0	915.2	925.0
22.5°	863.6	885.3	889.4	913.8	930.6
25°	842.0	863.5	878.0	913.6	939.0
27.5°	816.8	838.1	868.0	907.9	928.0
30°	800.0	820.5	856.0	897.4	916.0
32.5°	779.2	800.5	838.4	883.0	900.0
35°	746.0	766.5	812.0	858.2	868.0
37.5°	707.8	731.1	782.0	807.8	808.4
40°	679.0	709.3	758.0	762.7	750.0
42.5°	651.0	689.9	724.4	703.3	646.8
45°	608.0	654.0	668.0	566.1	527.0
47.5°	562.2	607.6	585.2	474.8	447.8
50°	531.0	574.0	518.0	424.4	399.0
52.5°	495.8	534.1	458.0	376.1	337.4
55°	441.0	467.4	389.0	293.2	256.0
57.5°	375.0	393.6	332.6	220.1	178.4
60°	331.0	345.7	291.0	180.5	160.0
62.5°	291.0	304.1	247.8	156.8	149.6
65°	236.0	248.7	190.0	134.0	133.0
67.5°	187.8	201.7	145.8	117.0	115.8
70°	159.0	173.7	121.0	105.0	103.0
72.5°	135.0	148.9	102.6	92.2	91.0
75°	102.0	112.8	79.0	74.0	73.0
77.5°	74.0	80.8	58.8	56.2	55.2
80°	58.0	60.9	46.0	45.0	44.0
82.5°	43.6	42.6	34.8	33.8	32.0
85°	23.0	21.0	19.0	14.9	12.0
87.5°	7.2	7.6	5.6	3.8	3.6
90°	0.0	2.0	12.0	7.0	6.0
92.5°	11.2	45.2	162.4	53.8	38.8
95°	33.0	104.3	501.9	185.4	117.0
97.5°	63.8	132.8	791.0	523.4	318.7
100°	83.0	150.4	883.8	854.4	573.8
102.5°	104.6	169.7	864.6	1198.4	955.3
105°	140.0	196.7	789.8	1499.9	1425.6
107.5°	173.6	227.7	717.8	1529.7	1615.8
110°	195.9	247.8	681.8	1492.2	1648.6



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	217.5	267.8	660.2	1429.1	1627.0
115°	248.9	296.8	638.8	1321.9	1552.6
117.5°	280.1	325.5	631.2	1221.4	1457.6
120°	300.9	343.9	628.8	1162.8	1389.6
122.5°	320.1	360.8	628.8	1111.3	1320.8
125°	347.9	386.0	629.8	1043.9	1228.7
127.5°	370.5	410.0	628.8	993.1	1150.7
130°	384.9	426.0	628.8	964.0	1106.7
132.5°	397.7	439.5	628.0	937.3	1069.1
135°	416.9	460.9	625.8	900.3	1012.7
137.5°	438.3	480.1	625.8	860.7	964.9
140°	451.9	492.9	625.8	835.0	933.8
142.5°	465.5	505.0	625.0	811.5	897.8
145°	486.9	523.0	625.8	774.4	846.8
147.5°	508.3	539.0	627.0	743.9	799.4
150°	521.9	550.2	627.8	726.9	773.8
152.5°	534.7	559.9	628.6	712.3	750.6
155°	554.9	573.4	629.8	694.4	720.8
157.5°	572.4	587.5	631.0	681.2	699.6
160°	582.8	595.6	631.8	673.1	686.8
162.5°	593.2	602.8	632.6	665.9	677.2
165°	606.8	613.7	632.8	657.0	664.8
167.5°	618.4	622.0	634.0	650.1	653.4
170°	624.8	626.8	634.8	646.8	647.8
172.5°	628.8	630.0	634.8	643.6	643.8
175°	634.8	634.8	635.8	640.8	638.8
177.5°	637.6	636.8	636.0	638.4	636.8
180°	636.8	636.8	636.8	636.8	636.8



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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	15.73	16.47	16.79	17.53	18.97	12.13	12.86	13.19	13.92	15.37
	3H	16.81	17.47	17.89	18.54	20.00	13.22	13.88	14.29	14.95	16.41
	4H	17.15	17.77	18.23	18.85	20.31	13.68	14.30	14.76	15.37	16.84
	6H	17.36	17.93	18.45	19.01	20.49	14.02	14.59	15.11	15.67	17.14
	8H	17.41	17.95	18.50	19.04	20.51	14.10	14.64	15.20	15.74	17.21
	12H	17.42	17.93	18.52	19.02	20.51	14.11	14.63	15.21	15.71	17.21
4H	2H	15.82	16.45	16.91	17.52	18.98	12.82	13.45	13.91	14.52	15.98
	3H	17.12	17.64	18.22	18.74	20.21	14.06	14.58	15.16	15.68	17.16
	4H	17.59	18.06	18.69	19.15	20.65	14.61	15.09	15.71	16.18	17.68
	6H	17.92	18.33	19.03	19.44	20.93	15.05	15.45	16.16	16.57	18.06
	8H	18.01	18.39	19.12	19.49	21.00	15.16	15.54	16.27	16.65	18.16
	12H	18.04	18.38	19.17	19.50	21.01	15.19	15.53	16.31	16.65	18.16
8H	4H	17.60	17.98	18.71	19.08	20.59	14.88	15.26	15.99	16.36	17.87
	6H	18.02	18.34	19.16	19.48	20.99	15.42	15.73	16.55	16.88	18.38
	8H	18.18	18.45	19.32	19.58	21.11	15.60	15.88	16.74	17.01	18.53
	12H	18.26	18.50	19.40	19.63	21.19	15.67	15.91	16.81	17.04	18.60
12H	4H	17.55	17.89	18.68	19.01	20.52	14.88	15.22	16.01	16.34	17.85
	6H	18.01	18.29	19.15	19.41	20.94	15.47	15.74	16.61	16.87	18.40
	8H	18.18	18.42	19.32	19.54	21.11	15.67	15.91	16.81	17.04	18.60