

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: P521628

Luminaire Tested: SQ4-F-125U-100D-92765-1D-UNV-STD-W-4\_3500K

Issue Date: 5-5-2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P521628  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2101-105-51, G2-2101-105-38)  
Test Lab: INNOVATION CENTER  
Issue Date: 5-5-2021  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4-F-125U-100D-92765-1D-UNV-STD-W-4\_3500K  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE  
DOWNLIGHT 1000 LUMENS PER FOOT  
UPLIGHT 1250 LUMENS PER FOOT  
Light Source: 2700K-6500K CCT, 90 CRI LEDS, TUNED TO 3500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 9597.2 lumens  
Efficiency: N/A  
Efficacy: 114.4 lumens/watt  
Spacing Criteria (0/90/45): 1.27 / 1.25 / 1.38  
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')  
CIE Type: General Diffuse

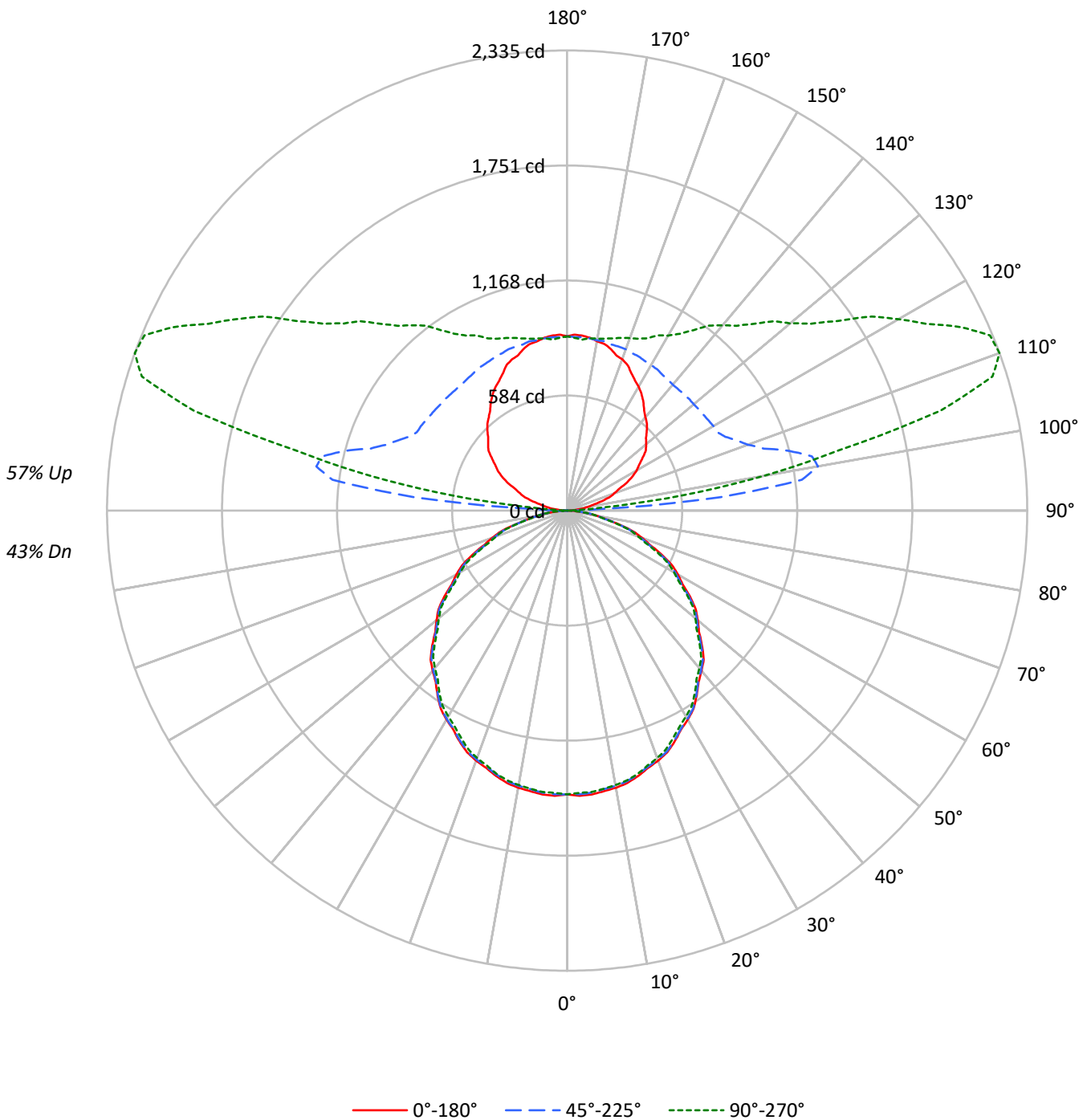
Input Watts (W): 83.9  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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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	105	105	105	105	96	96	96	96	79	79	79	64	64	64	49	49	49	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	79	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	29	25																				
4	73	62	54	48	66	57	50	45	47	42	38	38	35	31	30	27	25	21																				
5	67	55	47	41	61	51	43	38	42	37	33	34	30	27	27	24	22	18																				
6	61	49	41	35	56	45	38	33	38	32	28	31	27	24	24	21	19	16																				
7	57	44	36	31	51	41	34	29	34	29	25	28	24	21	22	19	17	14																				
8	52	40	32	27	48	37	30	25	31	26	22	26	21	18	20	17	15	13																				
9	49	37	29	24	44	34	27	23	28	23	20	23	19	17	19	16	14	11																				
10	45	33	26	22	42	31	25	20	26	21	18	22	18	15	17	14	12	10																				

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

	0°	45°	90°
0°	13286	13286	13286
5°	13392	13309	13272
10°	13378	13285	13247
15°	13315	13239	13210
20°	13255	13196	13117
25°	13153	13102	12959
30°	13040	13008	12848
35°	12908	12862	12727
40°	12779	12730	12574
45°	12630	12526	12382
50°	12416	12330	12186
55°	12241	12064	11919
60°	11957	11717	11551
65°	11570	11243	11068
70°	10898	10547	10359
75°	9839	9589	9447
80°	8129	8129	8023
85°	5716	6563	6775

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 12630 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	136.3	1.4
10°-20°	390.5	4.1
20°-30°	590.6	6.2
30°-40°	711.2	7.4
40°-50°	738.6	7.7
50°-60°	669.5	7.0
60°-70°	509.9	5.3
70°-80°	284.9	3.0
80°-90°	73.9	0.8
90°-100°	402.9	4.2
100°-110°	1146.3	11.9
110°-120°	1098.3	11.4
120°-130°	869.3	9.1
130°-140°	697.7	7.3
140°-150°	546.2	5.7
150°-160°	399.7	4.2
160°-170°	247.6	2.6
170°-180°	84.0	0.9
0°-30°	1117.4	11.6
0°-40°	1828.6	19.1
0°-60°	3236.7	33.7
0°-90°	4105.3	42.8
90°-120°	2647.5	27.6
90°-150°	4760.6	49.6
90°-180°	5492.0	57.2
0°-180°	9597.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1440	1440	1440	1440	1440	
5°	1446	1432	1437	1433	1433	137
15°	1394	1381	1386	1383	1383	393
25°	1292	1281	1287	1277	1273	595
35°	1146	1139	1142	1131	1130	717
45°	968	962	960	950	949	746
55°	761	758	750	741	741	678
65°	530	524	515	508	507	522
75°	276	272	269	265	265	292
85°	54	58	62	63	64	67
90°	0	0	0	0	0	4
95°	44	174	780	270	166	50
105°	178	270	1168	2063	1962	188
115°	331	400	886	1876	2204	326
125°	467	518	846	1403	1678	418
135°	572	619	835	1185	1340	441
145°	674	708	842	1026	1118	421
155°	770	788	862	927	965	356
165°	850	854	872	891	904	239
175°	891	886	882	877	871	84
180°	884	884	884	884	884	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1440.0	1440.0	1440.0	1440.0	1440.0
2.5°	1448.8	1437.1	1440.8	1438.3	1433.6
5°	1446.0	1432.3	1437.0	1433.0	1433.0
7.5°	1436.0	1422.9	1426.0	1423.6	1423.6
10°	1428.0	1413.3	1418.0	1414.0	1414.0
12.5°	1415.2	1402.1	1406.8	1402.8	1402.0
15°	1394.0	1381.3	1386.0	1383.0	1383.0
17.5°	1368.4	1356.3	1362.4	1357.6	1356.0
20°	1350.0	1336.3	1344.0	1336.0	1336.0
22.5°	1327.6	1315.5	1322.4	1312.8	1311.2
25°	1292.0	1281.2	1287.0	1276.9	1273.0
27.5°	1252.0	1240.5	1249.0	1237.8	1235.6
30°	1224.0	1213.2	1221.0	1208.9	1206.0
32.5°	1193.6	1184.4	1189.8	1178.6	1176.4
35°	1146.0	1139.2	1142.0	1131.0	1130.0
37.5°	1095.4	1088.8	1091.4	1079.2	1078.4
40°	1061.0	1055.1	1057.0	1044.0	1044.0
42.5°	1025.8	1019.2	1019.4	1007.2	1006.4
45°	968.0	962.1	960.0	950.0	949.0
47.5°	906.6	903.9	900.6	890.6	890.6
50°	865.0	863.0	859.0	849.0	849.0
52.5°	822.6	821.4	815.8	807.4	805.8
55°	761.0	758.1	750.0	741.0	741.0
57.5°	693.6	691.3	682.2	675.0	673.2
60°	648.0	644.1	635.0	627.0	626.0
62.5°	600.8	597.7	587.8	580.6	578.8
65°	530.0	524.1	515.0	508.0	507.0
67.5°	455.2	448.6	440.6	434.8	432.8
70°	404.0	398.1	391.0	386.0	384.0
72.5°	353.6	347.7	341.4	338.0	337.6
75°	276.0	272.1	269.0	265.0	265.0
77.5°	200.2	197.9	196.2	194.2	194.2
80°	153.0	153.0	153.0	151.0	151.0
82.5°	109.8	112.1	113.8	112.6	112.6
85°	54.0	57.9	62.0	63.0	64.0
87.5°	15.2	19.9	24.8	25.6	26.4
90°	0.0	0.0	0.0	0.0	0.0
92.5°	13.4	71.3	165.4	48.1	36.3
95°	43.7	173.5	779.9	269.9	166.4
97.5°	80.3	203.3	1201.1	859.5	589.0
100°	105.9	220.9	1292.6	1309.2	1008.5
102.5°	134.1	240.0	1272.4	1675.9	1413.2
105°	178.2	270.2	1168.2	2063.4	1961.5
107.5°	222.9	305.4	1046.5	2172.7	2263.4
110°	253.8	331.0	976.6	2130.9	2334.7

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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	283.4	356.7	929.5	2032.0	2322.6
115°	331.1	400.1	885.8	1876.5	2203.6
117.5°	373.1	437.9	859.9	1706.5	2053.0
120°	406.8	461.0	857.2	1609.4	1941.3
122.5°	433.7	487.9	850.5	1524.1	1832.4
125°	467.3	518.2	845.5	1403.0	1677.5
127.5°	503.9	551.6	842.8	1330.6	1556.8
130°	522.7	570.4	838.7	1280.2	1477.4
132.5°	542.9	589.3	838.7	1240.9	1422.3
135°	571.5	619.1	835.4	1185.1	1339.6
137.5°	598.4	644.7	835.0	1137.9	1271.4
140°	618.5	666.2	833.7	1098.8	1227.0
142.5°	641.4	681.2	837.7	1067.6	1182.6
145°	674.0	708.5	842.1	1025.7	1117.7
147.5°	701.9	735.4	849.5	983.4	1063.0
150°	726.1	749.1	852.2	969.4	1025.3
152.5°	744.9	769.3	854.9	950.5	1002.4
155°	769.8	787.9	862.3	927.0	964.8
157.5°	800.7	811.6	863.9	916.3	943.3
160°	816.9	825.1	870.7	908.2	931.2
162.5°	826.3	835.8	872.0	901.3	919.1
165°	850.5	853.8	872.3	891.1	904.3
167.5°	867.0	864.0	880.1	888.6	893.9
170°	872.3	870.7	877.4	879.2	885.8
172.5°	884.4	878.9	881.4	876.5	881.8
175°	890.8	885.9	882.4	877.2	870.7
177.5°	893.5	885.6	881.4	876.1	877.4
180°	884.1	884.1	884.1	884.1	884.1

(END OF REPORT)