

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: P521680

Luminaire Tested: SQ4-F-150U-100D-92765-1D-UNV-STD-W-4\_3500K

Issue Date: 5-5-2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P521680  
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-150U-100D-92765-1D-UNV-STD-W-4\_3500K  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE  
DOWNLIGHT 1000 LUMENS PER FOOT  
UPLIGHT 1500 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: 10723.8 lumens  
Efficiency: N/A  
Efficacy: 114.6 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: Semi-Indirect

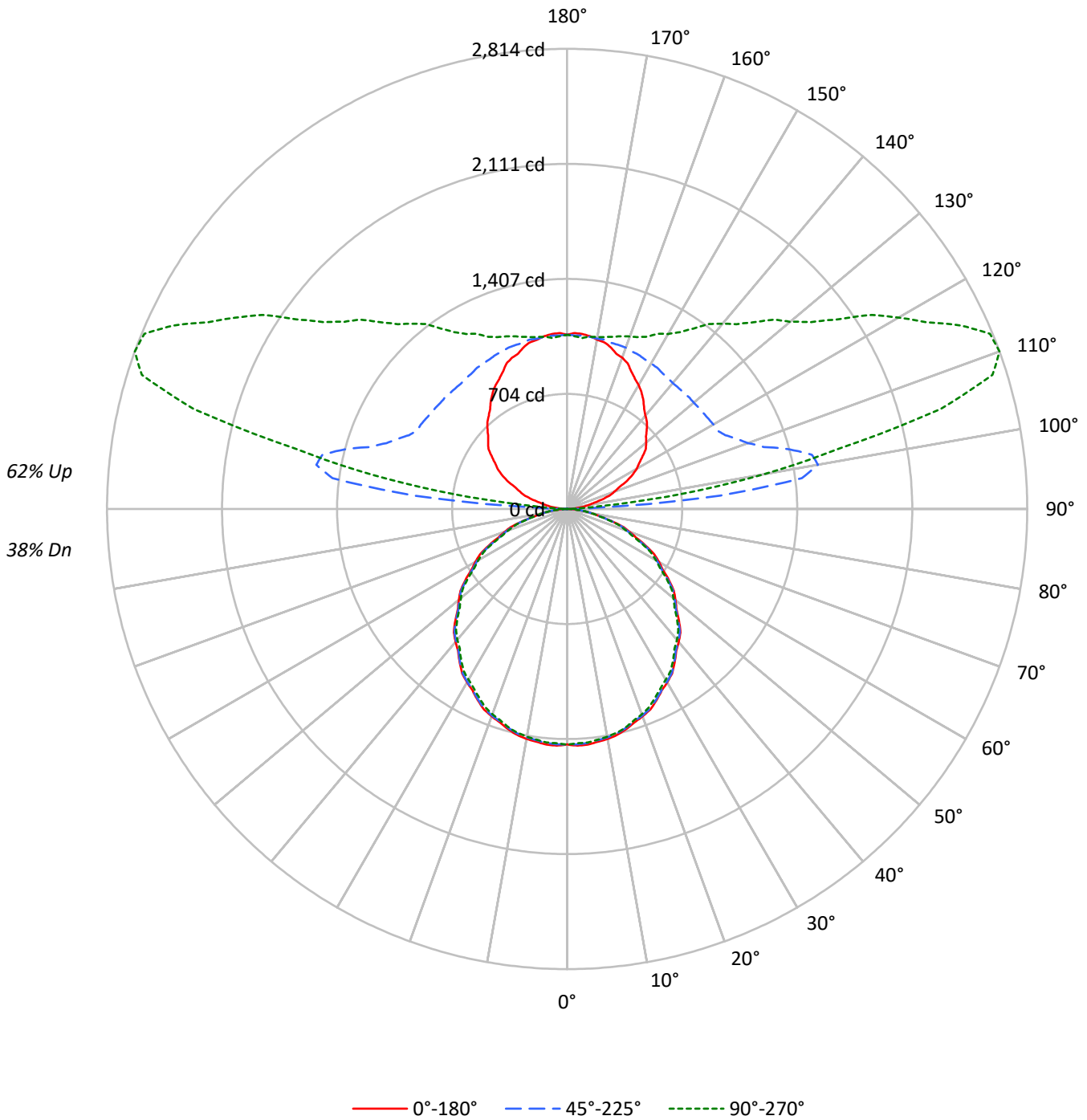
Input Watts (W): 93.6  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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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	95	95	95	95	77	77	77	60	60	60	45	45	45	38				
1	95	91	87	83	86	83	79	76	67	65	63	53	51	50	40	39	38	32				
2	86	79	73	68	78	72	67	62	59	55	52	46	44	42	35	33	32	27				
3	79	69	62	56	71	63	57	52	52	47	43	41	38	35	31	29	27	22				
4	72	61	53	47	65	56	49	44	46	41	37	36	33	30	27	25	23	19				
5	66	54	46	40	60	50	43	37	41	35	31	32	29	26	25	22	20	16				
6	61	49	41	35	55	44	37	32	37	31	27	29	25	22	22	20	18	14				
7	56	44	36	30	51	40	33	28	33	28	24	26	23	20	20	18	15	13				
8	52	40	32	27	47	36	30	25	30	25	21	24	20	17	19	16	14	11				
9	48	36	29	24	44	33	27	22	27	22	19	22	18	16	17	14	12	10				
10	45	33	26	21	41	30	24	20	25	20	17	20	17	14	16	13	11	9				

**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	1.3
10°-20°	390.5	3.6
20°-30°	590.6	5.5
30°-40°	711.2	6.6
40°-50°	738.6	6.9
50°-60°	669.5	6.2
60°-70°	509.9	4.8
70°-80°	284.9	2.7
80°-90°	73.9	0.7
90°-100°	485.5	4.5
100°-110°	1381.5	12.9
110°-120°	1323.6	12.3
120°-130°	1047.6	9.8
130°-140°	840.8	7.8
140°-150°	658.3	6.1
150°-160°	481.7	4.5
160°-170°	298.3	2.8
170°-180°	101.2	0.9
0°-30°	1117.4	10.4
0°-40°	1828.6	17.1
0°-60°	3236.7	30.2
0°-90°	4105.3	38.3
90°-120°	3190.6	29.8
90°-150°	5737.2	53.5
90°-180°	6618.0	61.7
0°-180°	10723.8	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°	53	209	940	325	200	60
105°	215	326	1408	2487	2364	227
115°	399	482	1068	2262	2656	393
125°	563	624	1019	1691	2022	504
135°	689	746	1007	1428	1614	531
145°	812	854	1015	1236	1347	507
155°	928	950	1039	1117	1163	429
165°	1025	1029	1051	1074	1090	288
175°	1074	1068	1064	1057	1049	102
180°	1066	1066	1066	1066	1066	

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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°	16.2	85.9	199.3	58.0	43.8
95°	52.7	209.1	939.9	325.3	200.5
97.5°	96.8	245.0	1447.5	1035.8	709.8
100°	127.6	266.3	1557.7	1577.8	1215.4
102.5°	161.6	289.2	1533.4	2019.7	1703.2
105°	214.7	325.6	1407.8	2486.7	2363.9
107.5°	268.6	368.0	1261.2	2618.4	2727.7
110°	305.9	399.0	1176.9	2568.0	2813.6

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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	341.5	429.9	1120.2	2448.9	2799.0
115°	399.1	482.2	1067.5	2261.5	2655.6
117.5°	449.7	527.7	1036.3	2056.6	2474.1
120°	490.2	555.6	1033.1	1939.5	2339.6
122.5°	522.6	588.0	1025.0	1836.8	2208.4
125°	563.1	624.5	1018.9	1690.8	2021.6
127.5°	607.3	664.7	1015.7	1603.6	1876.1
130°	630.0	687.4	1010.8	1542.9	1780.5
132.5°	654.3	710.1	1010.8	1495.4	1714.1
135°	688.7	746.2	1006.7	1428.3	1614.4
137.5°	721.1	777.0	1006.3	1371.4	1532.2
140°	745.4	802.9	1004.7	1324.2	1478.7
142.5°	773.0	820.9	1009.6	1286.6	1425.2
145°	812.3	853.9	1014.8	1236.1	1347.0
147.5°	845.9	886.3	1023.8	1185.2	1281.0
150°	875.1	902.8	1027.0	1168.3	1235.6
152.5°	897.8	927.1	1030.2	1145.5	1208.1
155°	927.7	949.5	1039.2	1117.2	1162.7
157.5°	965.0	978.1	1041.2	1104.3	1136.8
160°	984.5	994.4	1049.3	1094.5	1122.2
162.5°	995.8	1007.3	1050.9	1086.2	1107.6
165°	1025.0	1028.9	1051.3	1073.9	1089.8
167.5°	1044.8	1041.3	1060.6	1070.9	1077.2
170°	1051.3	1049.3	1057.4	1059.6	1067.5
172.5°	1065.9	1059.2	1062.2	1056.3	1062.6
175°	1073.6	1067.6	1063.5	1057.2	1049.3
177.5°	1076.8	1067.3	1062.2	1055.8	1057.4
180°	1065.5	1065.5	1065.5	1065.5	1065.5

(END OF REPORT)