

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: P521682

Luminaire Tested: SQ4-F-150U-100D-92765-1D-UNV-STD-W-4\_4500K

Issue Date: 5-5-2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P521682  
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\_4500K  
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 4500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 11096.1 lumens  
Efficiency: N/A  
Efficacy: 118.8 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

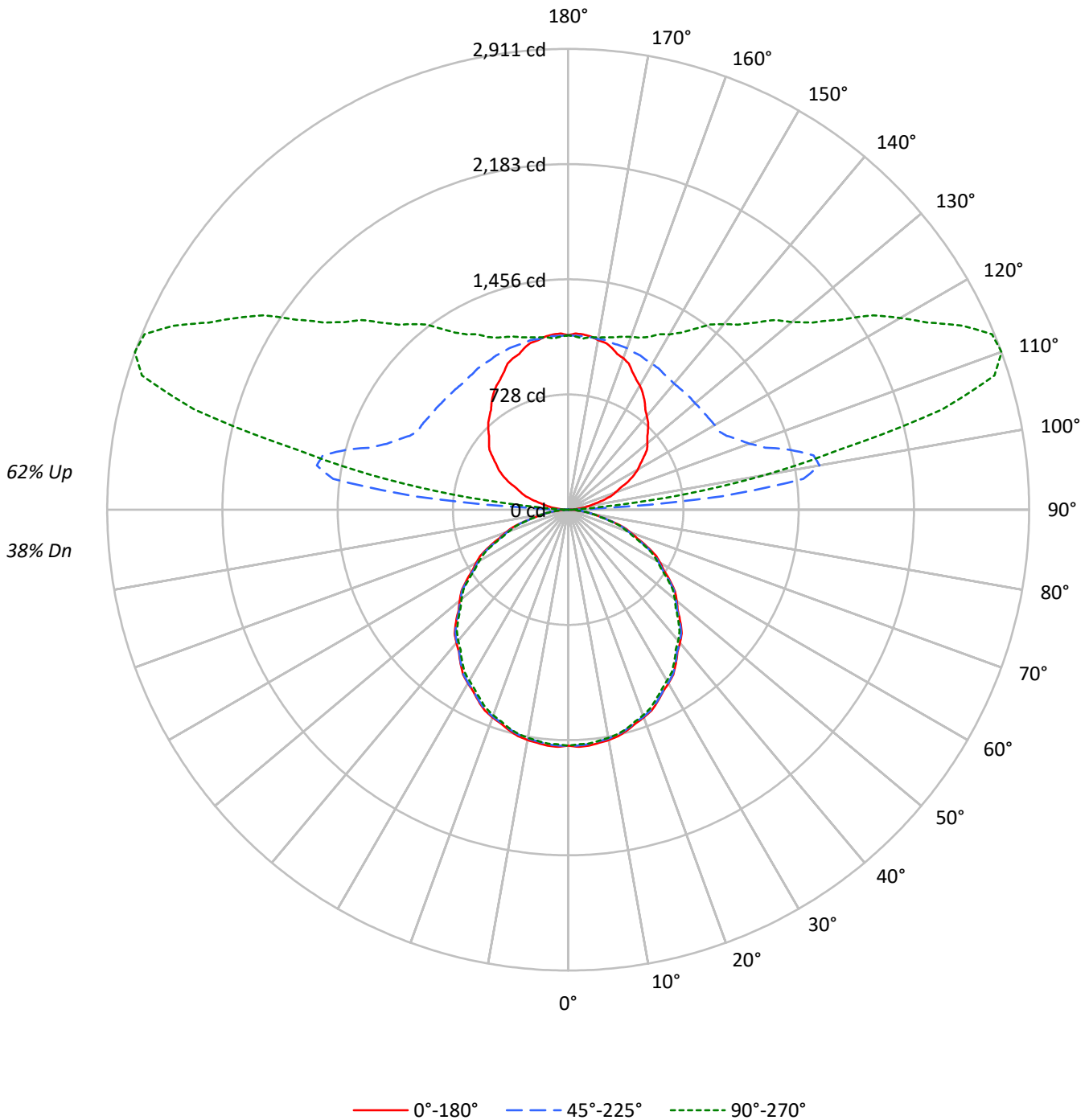
Input Watts (W): 93.4  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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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	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°	13747	13747	13747
5°	13857	13771	13733
10°	13843	13746	13707
15°	13777	13698	13668
20°	13715	13654	13573
25°	13610	13557	13409
30°	13493	13460	13295
35°	13356	13308	13169
40°	13222	13172	13010
45°	13069	12960	12812
50°	12846	12757	12609
55°	12666	12482	12333
60°	12372	12123	11952
65°	11972	11634	11453
70°	11276	10914	10717
75°	10181	9921	9774
80°	8411	8411	8299
85°	5918	6796	7008

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 13069 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	141.1	1.3
10°-20°	404.1	3.6
20°-30°	611.1	5.5
30°-40°	735.8	6.6
40°-50°	764.2	6.9
50°-60°	692.7	6.2
60°-70°	527.6	4.8
70°-80°	294.8	2.7
80°-90°	76.5	0.7
90°-100°	502.4	4.5
100°-110°	1429.4	12.9
110°-120°	1369.6	12.3
120°-130°	1083.9	9.8
130°-140°	870.0	7.8
140°-150°	681.1	6.1
150°-160°	498.4	4.5
160°-170°	308.7	2.8
170°-180°	104.8	0.9
0°-30°	1156.2	10.4
0°-40°	1892.1	17.1
0°-60°	3349.0	30.2
0°-90°	4247.8	38.3
90°-120°	3301.4	29.8
90°-150°	5936.5	53.5
90°-180°	6848.0	61.7
0°-180°	11096.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1490	1490	1490	1490	1490	
5°	1496	1482	1487	1483	1483	142
15°	1442	1429	1434	1431	1431	407
25°	1337	1326	1332	1321	1317	616
35°	1186	1179	1182	1170	1169	742
45°	1002	996	993	983	982	772
55°	787	784	776	767	767	702
65°	548	542	533	526	525	541
75°	286	282	278	274	274	302
85°	56	60	64	65	66	70
90°	0	0	0	0	0	4
95°	54	216	972	337	208	62
105°	222	337	1457	2573	2446	235
115°	413	499	1105	2340	2748	407
125°	583	646	1054	1750	2092	522
135°	713	772	1042	1478	1670	550
145°	840	884	1050	1279	1394	525
155°	960	982	1075	1156	1203	444
165°	1061	1065	1088	1111	1128	298
175°	1111	1105	1100	1094	1086	105
180°	1102	1102	1102	1102	1102	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1490.0	1490.0	1490.0	1490.0	1490.0
2.5°	1499.1	1487.0	1490.8	1488.2	1483.4
5°	1496.2	1482.0	1486.9	1482.8	1482.8
7.5°	1485.9	1472.3	1475.5	1473.0	1473.0
10°	1477.6	1462.4	1467.2	1463.1	1463.1
12.5°	1464.3	1450.8	1455.6	1451.5	1450.7
15°	1442.4	1429.2	1434.1	1431.0	1431.0
17.5°	1415.9	1403.4	1409.7	1404.7	1403.1
20°	1396.9	1382.7	1390.7	1382.4	1382.4
22.5°	1373.7	1361.1	1368.3	1358.3	1356.7
25°	1336.9	1325.7	1331.7	1321.2	1317.2
27.5°	1295.5	1283.5	1292.4	1280.7	1278.5
30°	1266.5	1255.4	1263.4	1250.9	1247.9
32.5°	1235.0	1225.5	1231.1	1219.5	1217.2
35°	1185.8	1178.7	1181.6	1170.2	1169.2
37.5°	1133.4	1126.6	1129.3	1116.7	1115.8
40°	1097.8	1091.8	1093.7	1080.2	1080.2
42.5°	1061.4	1054.5	1054.8	1042.2	1041.3
45°	1001.6	995.5	993.3	983.0	981.9
47.5°	938.1	935.2	931.9	921.5	921.5
50°	895.0	893.0	888.8	878.5	878.5
52.5°	851.2	849.9	844.1	835.4	833.8
55°	787.4	784.4	776.0	766.7	766.7
57.5°	717.7	715.3	705.9	698.4	696.6
60°	670.5	666.5	657.0	648.7	647.7
62.5°	621.7	618.4	608.2	600.7	598.9
65°	548.4	542.3	532.9	525.6	524.6
67.5°	471.0	464.1	455.9	449.9	447.8
70°	418.0	412.0	404.6	399.4	397.3
72.5°	365.9	359.8	353.3	349.7	349.3
75°	285.6	281.5	278.3	274.2	274.2
77.5°	207.2	204.7	203.0	200.9	200.9
80°	158.3	158.3	158.3	156.2	156.2
82.5°	113.6	116.0	117.8	116.5	116.5
85°	55.9	59.9	64.2	65.2	66.2
87.5°	15.7	20.6	25.7	26.5	27.3
90°	0.0	0.0	0.0	0.0	0.0
92.5°	16.8	88.9	206.2	60.0	45.3
95°	54.5	216.4	972.5	336.6	207.5
97.5°	100.2	253.5	1497.8	1071.8	734.4
100°	132.0	275.5	1611.8	1632.6	1257.6
102.5°	167.3	299.2	1586.6	2089.8	1762.3
105°	222.2	336.9	1456.7	2573.1	2446.0
107.5°	277.9	380.8	1305.0	2709.3	2822.4
110°	316.5	412.8	1217.8	2657.2	2911.3

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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	353.4	444.8	1159.1	2533.9	2896.2
115°	412.9	499.0	1104.6	2340.0	2747.8
117.5°	465.3	546.1	1072.3	2128.0	2560.0
120°	507.2	574.9	1068.9	2006.9	2420.8
122.5°	540.8	608.4	1060.6	1900.6	2285.0
125°	582.7	646.2	1054.3	1749.5	2091.8
127.5°	628.4	687.8	1050.9	1659.3	1941.3
130°	651.8	711.3	1045.9	1596.4	1842.4
132.5°	677.0	734.8	1045.9	1547.4	1773.6
135°	712.6	772.1	1041.7	1477.8	1670.5
137.5°	746.2	804.0	1041.3	1419.0	1585.4
140°	771.3	830.7	1039.6	1370.2	1530.1
142.5°	799.8	849.4	1044.6	1331.3	1474.7
145°	840.5	883.5	1050.1	1279.1	1393.8
147.5°	875.3	917.1	1059.3	1226.3	1325.5
150°	905.5	934.2	1062.7	1208.9	1278.5
152.5°	928.9	959.3	1066.0	1185.3	1250.0
155°	960.0	982.5	1075.2	1156.0	1203.1
157.5°	998.5	1012.0	1077.3	1142.6	1176.3
160°	1018.6	1028.9	1085.7	1132.5	1161.2
162.5°	1030.4	1042.3	1087.4	1123.9	1146.1
165°	1060.6	1064.7	1087.8	1111.2	1127.6
167.5°	1081.1	1077.4	1097.4	1108.1	1114.6
170°	1087.8	1085.8	1094.1	1096.4	1104.6
172.5°	1102.9	1095.9	1099.1	1093.0	1099.5
175°	1110.9	1104.7	1100.4	1093.9	1085.7
177.5°	1114.2	1104.4	1099.1	1092.5	1094.1
180°	1102.5	1102.5	1102.5	1102.5	1102.5

(END OF REPORT)