

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: P521684

Luminaire Tested: SQ4-F-150U-100D-92765-1D-UNV-STD-W-4\_5700K

Issue Date: 5-5-2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P521684  
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\_5700K  
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 5700K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 11378.7 lumens  
Efficiency: N/A  
Efficacy: 122.0 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

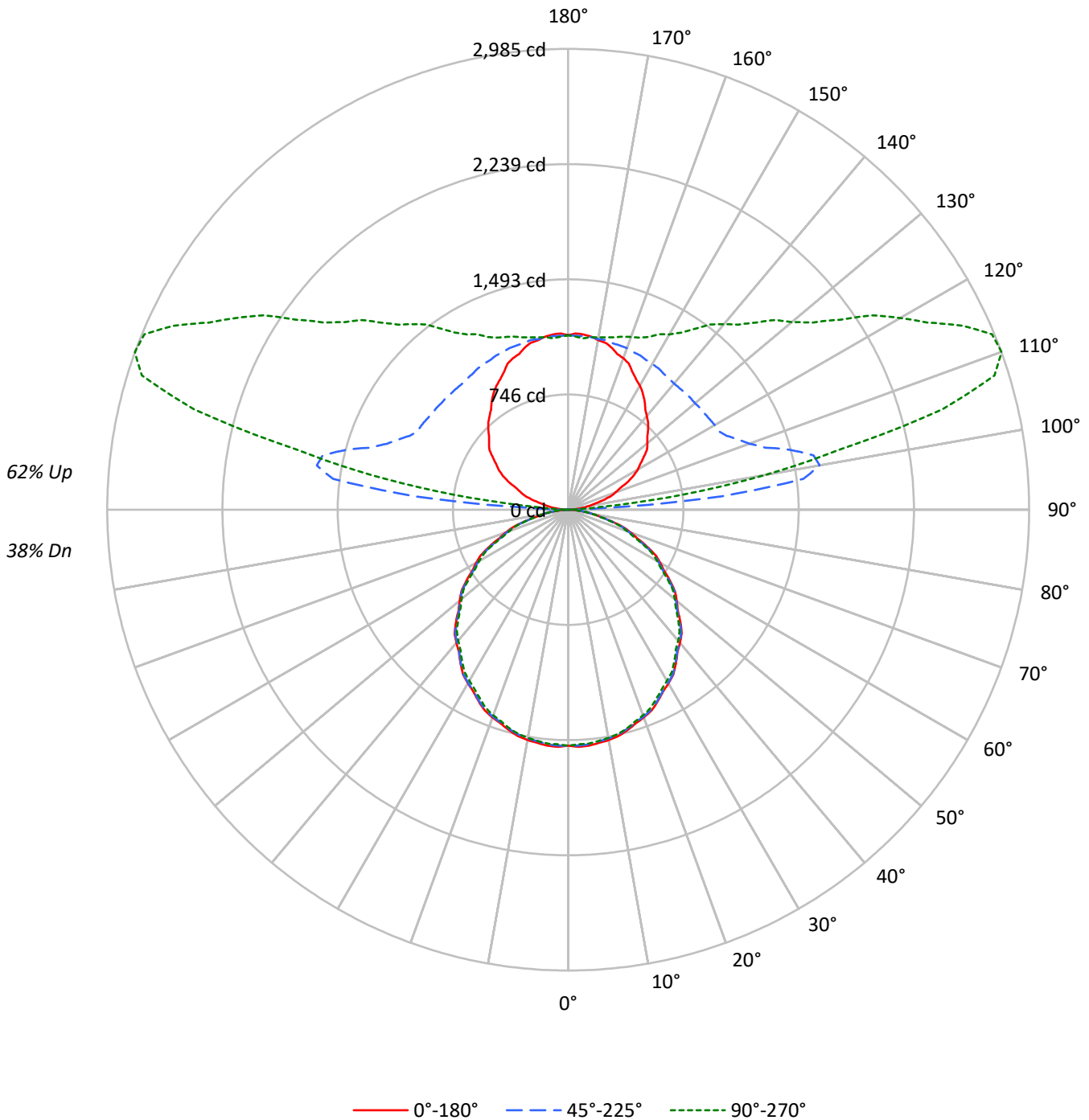
Input Watts (W): 93.3  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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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°	14097	14097	14097
5°	14210	14122	14082
10°	14195	14096	14057
15°	14128	14047	14017
20°	14064	14002	13918
25°	13956	13902	13750
30°	13836	13803	13633
35°	13696	13648	13504
40°	13559	13508	13342
45°	13401	13291	13139
50°	13174	13083	12930
55°	12989	12801	12648
60°	12688	12433	12256
65°	12278	11931	11745
70°	11564	11192	10993
75°	10441	10174	10024
80°	8623	8623	8512
85°	6066	6966	7188

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 13401 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	144.7	1.3
10°-20°	414.4	3.6
20°-30°	626.6	5.5
30°-40°	754.6	6.6
40°-50°	783.7	6.9
50°-60°	710.4	6.2
60°-70°	541.0	4.8
70°-80°	302.3	2.7
80°-90°	78.4	0.7
90°-100°	515.2	4.5
100°-110°	1465.8	12.9
110°-120°	1404.4	12.3
120°-130°	1111.5	9.8
130°-140°	892.2	7.8
140°-150°	698.5	6.1
150°-160°	511.1	4.5
160°-170°	316.6	2.8
170°-180°	107.4	0.9
0°-30°	1185.7	10.4
0°-40°	1940.3	17.1
0°-60°	3434.3	30.2
0°-90°	4356.0	38.3
90°-120°	3385.4	29.8
90°-150°	6087.6	53.5
90°-180°	7023.0	61.7
0°-180°	11378.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1528	1528	1528	1528	1528	
5°	1534	1520	1525	1520	1520	146
15°	1479	1466	1471	1468	1468	417
25°	1371	1360	1366	1355	1351	631
35°	1216	1209	1212	1200	1199	761
45°	1027	1021	1019	1008	1007	791
55°	808	804	796	786	786	720
65°	562	556	546	539	538	554
75°	293	289	285	281	281	310
85°	57	61	66	67	68	71
90°	0	0	0	0	0	5
95°	56	222	997	345	213	64
105°	228	346	1494	2639	2508	241
115°	423	512	1133	2400	2818	417
125°	598	663	1081	1794	2145	535
135°	731	792	1068	1516	1713	564
145°	862	906	1077	1312	1429	538
155°	984	1008	1103	1185	1234	455
165°	1088	1092	1116	1140	1156	306
175°	1139	1133	1128	1122	1113	108
180°	1131	1131	1131	1131	1131	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1527.9	1527.9	1527.9	1527.9	1527.9
2.5°	1537.3	1524.8	1528.8	1526.1	1521.1
5°	1534.3	1519.8	1524.8	1520.5	1520.5
7.5°	1523.7	1509.8	1513.1	1510.5	1510.5
10°	1515.2	1499.6	1504.6	1500.4	1500.4
12.5°	1501.6	1487.7	1492.7	1488.5	1487.6
15°	1479.1	1465.6	1470.6	1467.5	1467.5
17.5°	1452.0	1439.1	1445.6	1440.5	1438.8
20°	1432.4	1417.9	1426.1	1417.6	1417.6
22.5°	1408.7	1395.8	1403.2	1392.9	1391.3
25°	1370.9	1359.5	1365.6	1354.9	1350.7
27.5°	1328.5	1316.2	1325.3	1313.3	1311.1
30°	1298.7	1287.3	1295.6	1282.8	1279.7
32.5°	1266.5	1256.7	1262.5	1250.5	1248.2
35°	1216.0	1208.7	1211.7	1200.0	1199.0
37.5°	1162.3	1155.2	1158.1	1145.1	1144.3
40°	1125.8	1119.6	1121.6	1107.8	1107.8
42.5°	1088.4	1081.4	1081.7	1068.7	1067.9
45°	1027.1	1020.9	1018.6	1008.0	1007.0
47.5°	962.0	959.1	955.6	945.0	945.0
50°	917.8	915.8	911.5	900.8	900.8
52.5°	872.8	871.6	865.6	856.7	855.0
55°	807.5	804.4	795.8	786.3	786.3
57.5°	736.0	733.5	723.9	716.2	714.3
60°	687.6	683.4	673.8	665.3	664.2
62.5°	637.5	634.2	623.7	616.0	614.1
65°	562.4	556.1	546.5	539.0	538.0
67.5°	483.0	475.9	467.5	461.3	459.2
70°	428.7	422.4	414.9	409.5	407.5
72.5°	375.2	369.0	362.2	358.6	358.2
75°	292.9	288.7	285.4	281.2	281.2
77.5°	212.4	209.9	208.2	206.1	206.1
80°	162.3	162.3	162.3	160.2	160.2
82.5°	116.5	119.0	120.7	119.5	119.5
85°	57.3	61.4	65.8	66.9	67.9
87.5°	16.1	21.1	26.3	27.2	28.0
90°	0.0	0.0	0.0	0.0	0.0
92.5°	17.2	91.2	211.5	61.6	46.4
95°	55.9	221.9	997.3	345.2	212.8
97.5°	102.7	259.9	1535.9	1099.1	753.1
100°	135.4	282.5	1652.8	1674.2	1289.6
102.5°	171.5	306.9	1627.1	2143.0	1807.2
105°	227.8	345.5	1493.8	2638.6	2508.3
107.5°	285.0	390.5	1338.2	2778.3	2894.3
110°	324.6	423.3	1248.8	2724.8	2985.4

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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	362.4	456.1	1188.6	2598.4	2970.0
115°	423.4	511.7	1132.7	2399.6	2817.8
117.5°	477.2	560.0	1099.6	2182.2	2625.2
120°	520.1	589.5	1096.2	2058.0	2482.5
122.5°	554.5	623.9	1087.6	1949.0	2343.2
125°	597.5	662.7	1081.1	1794.1	2145.0
127.5°	644.4	705.3	1077.7	1701.5	1990.7
130°	668.4	729.4	1072.5	1637.1	1889.3
132.5°	694.2	753.5	1072.5	1586.8	1818.8
135°	730.8	791.7	1068.2	1515.5	1713.0
137.5°	765.2	824.4	1067.8	1455.1	1625.8
140°	791.0	851.9	1066.1	1405.1	1569.0
142.5°	820.2	871.0	1071.2	1365.2	1512.3
145°	861.9	906.0	1076.8	1311.6	1429.3
147.5°	897.6	940.4	1086.3	1257.5	1359.2
150°	928.5	957.9	1089.7	1239.6	1311.1
152.5°	952.6	983.7	1093.2	1215.5	1281.9
155°	984.4	1007.5	1102.6	1185.4	1233.7
157.5°	1023.9	1037.8	1104.8	1171.7	1206.2
160°	1044.6	1055.1	1113.4	1161.3	1190.7
162.5°	1056.6	1068.8	1115.1	1152.6	1175.3
165°	1087.6	1091.8	1115.5	1139.5	1156.3
167.5°	1108.6	1104.8	1125.4	1136.3	1143.0
170°	1115.5	1113.4	1122.0	1124.3	1132.7
172.5°	1131.0	1123.8	1127.1	1120.8	1127.5
175°	1139.2	1132.8	1128.4	1121.8	1113.4
177.5°	1142.6	1132.5	1127.1	1120.3	1122.0
180°	1130.6	1130.6	1130.6	1130.6	1130.6

(END OF REPORT)