

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: P521672

Luminaire Tested: SQ4-F-150U-075D-92765-1D-UNV-STD-W-4\_6500K

Issue Date: 5-5-2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P521672  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2101-105-51, G2-2101-105-37)  
Test Lab: INNOVATION CENTER  
Issue Date: 5-5-2021  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4-F-150U-075D-92765-1D-UNV-STD-W-4\_6500K  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE  
DOWNLIGHT 750 LUMENS PER FOOT  
UPLIGHT 1500 LUMENS PER FOOT  
Light Source: 2700K-6500K CCT, 90 CRI LEDS, TUNED TO 6500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

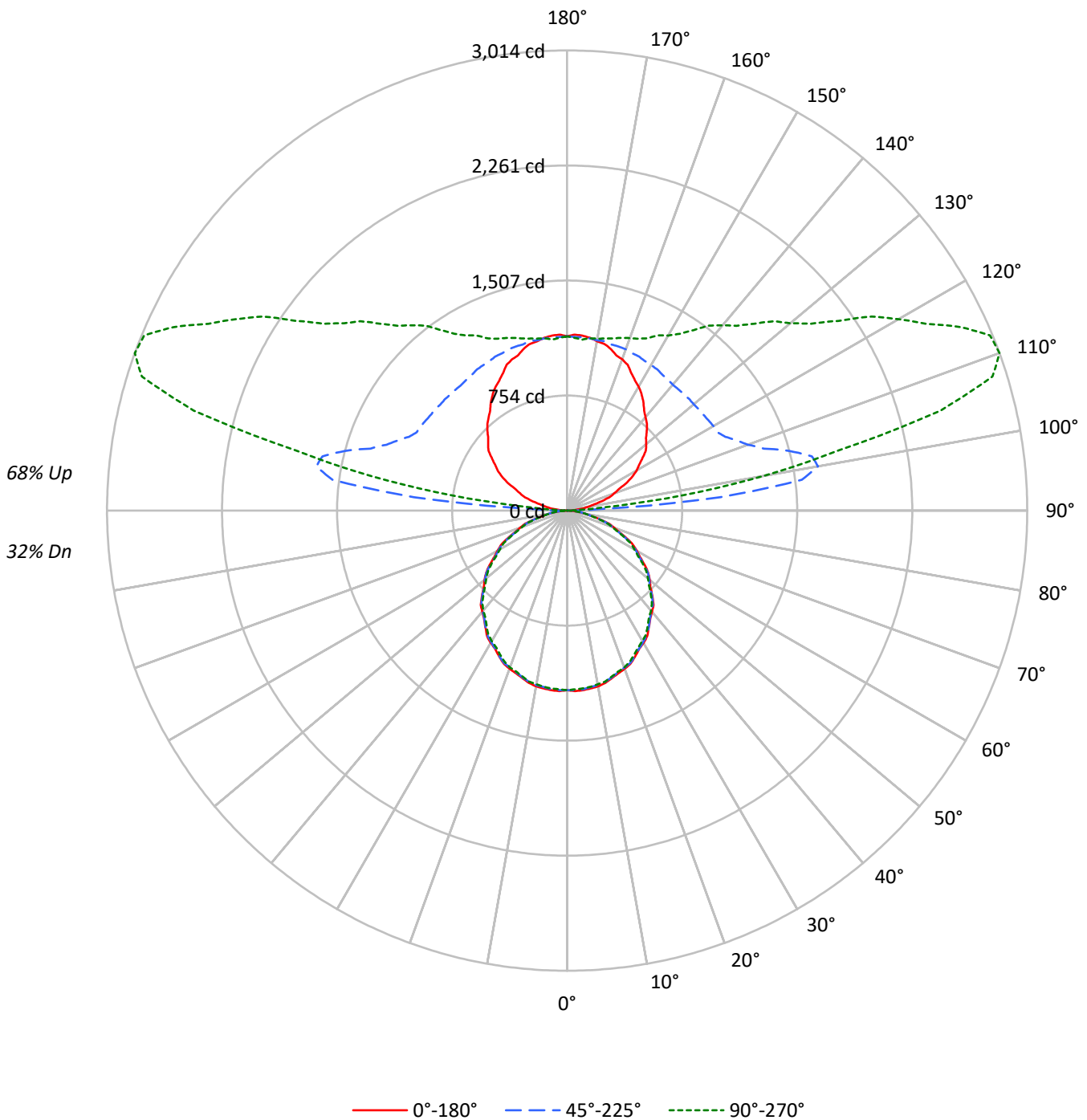
Lumens per Lamp: N/A  
Luminaire Lumens: 10434.4 lumens  
Efficiency: N/A  
Efficacy: 126.5 lumens/watt  
Spacing Criteria (0/90/45): 1.27 / 1.25 / 1.38  
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')  
CIE Type: Semi-Indirect  
  
Input Watts (W): 82.5  
Input Voltage (V): 120  
Input Current (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			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	0
RCR																		
0	103	103	103	103	93	93	93	93	73	73	73	56	56	56	40	40	40	32
1	94	89	86	82	84	81	77	75	64	62	60	49	47	46	35	34	33	27
2	85	78	72	67	76	70	65	61	56	52	49	43	40	38	31	29	28	22
3	78	68	61	56	70	62	56	51	49	45	41	38	35	32	27	25	24	19
4	71	60	53	47	63	55	48	43	44	39	35	33	30	27	24	22	20	16
5	65	54	46	40	58	48	42	36	39	34	30	30	26	24	22	19	17	14
6	60	48	40	34	53	43	37	31	35	30	26	27	23	21	19	17	15	12
7	55	43	35	30	49	39	32	27	31	26	23	24	21	18	18	15	14	11
8	51	39	31	26	46	35	29	24	29	24	20	22	19	16	16	14	12	10
9	47	35	28	23	43	32	26	21	26	21	18	20	17	14	15	13	11	9
10	44	32	25	21	40	29	23	19	24	19	16	19	15	13	14	11	10	8

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

	0°	45°	90°
0°	10851	10851	10851
5°	10932	10892	10833
10°	10958	10878	10828
15°	10845	10804	10753
20°	10822	10748	10737
25°	10730	10708	10588
30°	10658	10590	10510
35°	10508	10496	10363
40°	10411	10359	10295
45°	10287	10231	10119
50°	10146	10070	9933
55°	9958	9838	9699
60°	9724	9566	9389
65°	9400	9191	9027
70°	8813	8611	8408
75°	7942	7714	7600
80°	6487	6546	6429
85°	4647	5325	5325

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 10287 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	111.4	1.1
10°-20°	318.7	3.1
20°-30°	482.2	4.6
30°-40°	580.0	5.6
40°-50°	602.2	5.8
50°-60°	545.5	5.2
60°-70°	415.0	4.0
70°-80°	230.6	2.2
80°-90°	59.4	0.6
90°-100°	520.1	5.0
100°-110°	1479.7	14.2
110°-120°	1417.7	13.6
120°-130°	1122.1	10.8
130°-140°	900.6	8.6
140°-150°	705.1	6.8
150°-160°	515.9	4.9
160°-170°	319.6	3.1
170°-180°	108.4	1.0
0°-30°	912.4	8.7
0°-40°	1492.4	14.3
0°-60°	2640.1	25.3
0°-90°	3345.1	32.1
90°-120°	3417.5	32.8
90°-150°	6145.3	58.9
90°-180°	7089.0	67.9
0°-180°	10434.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1176	1176	1176	1176	1176	
5°	1180	1170	1176	1171	1170	112
15°	1135	1126	1131	1130	1126	321
25°	1054	1045	1052	1041	1040	486
35°	933	929	932	921	920	585
45°	788	783	784	776	776	608
55°	619	618	612	606	603	553
65°	431	424	421	414	414	424
75°	223	220	216	214	213	236
85°	44	47	50	50	50	54
90°	0	0	0	0	0	4
95°	56	224	1007	348	215	64
105°	230	349	1508	2664	2532	243
115°	427	516	1143	2422	2844	421
125°	603	669	1091	1811	2165	540
135°	738	799	1078	1530	1729	569
145°	870	915	1087	1324	1443	544
155°	994	1017	1113	1197	1245	459
165°	1098	1102	1126	1150	1167	309
175°	1150	1144	1139	1132	1124	109
180°	1141	1141	1141	1141	1141	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1176.1	1176.1	1176.1	1176.1	1176.1
2.5°	1183.8	1173.8	1177.0	1174.3	1171.8
5°	1180.4	1169.9	1176.1	1170.7	1169.7
7.5°	1174.8	1162.5	1165.4	1164.3	1164.3
10°	1169.7	1154.0	1161.1	1155.8	1155.8
12.5°	1156.0	1142.8	1148.3	1145.5	1147.2
15°	1135.4	1126.0	1131.1	1130.0	1125.8
17.5°	1117.6	1106.3	1110.1	1108.2	1106.5
20°	1102.2	1091.7	1094.7	1089.4	1093.6
22.5°	1085.1	1074.6	1080.1	1071.3	1071.3
25°	1054.0	1044.6	1051.9	1041.1	1040.1
27.5°	1021.0	1014.9	1019.7	1011.7	1008.8
30°	1000.4	991.0	994.0	988.6	986.5
32.5°	976.4	967.0	970.0	960.4	961.7
35°	933.0	928.8	931.9	921.2	920.1
37.5°	893.5	885.2	890.1	881.3	880.5
40°	864.4	856.0	860.1	854.8	854.8
42.5°	837.8	828.6	831.0	823.9	821.3
45°	788.4	783.1	784.1	775.5	775.5
47.5°	739.5	735.7	734.2	725.4	727.1
50°	706.9	700.7	701.6	692.0	692.0
52.5°	669.2	669.7	665.6	659.3	654.2
55°	619.1	618.1	611.6	606.2	603.0
57.5°	565.6	560.7	556.1	548.8	548.2
60°	527.0	523.9	518.4	511.9	508.8
62.5°	487.6	484.4	479.0	473.4	472.8
65°	430.6	424.3	421.0	414.5	413.5
67.5°	368.7	363.7	359.5	354.3	353.7
70°	326.7	322.5	319.2	314.8	311.7
72.5°	288.1	281.4	278.1	274.6	272.3
75°	222.8	219.7	216.4	214.2	213.2
77.5°	159.8	160.0	160.0	157.2	156.2
80°	122.1	123.2	123.2	122.1	121.0
82.5°	88.7	90.6	91.5	90.4	90.2
85°	43.9	47.1	50.3	50.3	50.3
87.5°	12.0	16.2	19.7	20.5	19.7
90°	0.0	0.0	0.0	0.0	0.0
92.5°	17.4	92.0	213.5	62.1	46.9
95°	56.4	224.0	1006.8	348.5	214.8
97.5°	103.7	262.4	1550.5	1109.5	760.3
100°	136.7	285.2	1668.5	1690.1	1301.8
102.5°	173.1	309.8	1642.5	2163.3	1824.3
105°	230.0	348.8	1508.0	2663.6	2532.1
107.5°	287.7	394.2	1350.9	2804.6	2921.8
110°	327.6	427.3	1260.6	2750.7	3013.7

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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	365.8	460.4	1199.9	2623.0	2998.1
115°	427.4	516.5	1143.4	2422.3	2844.5
117.5°	481.7	565.3	1110.0	2202.9	2650.1
120°	525.1	595.1	1106.6	2077.5	2506.0
122.5°	559.8	629.8	1097.9	1967.4	2365.4
125°	603.2	669.0	1091.4	1811.1	2165.4
127.5°	650.5	712.0	1087.9	1717.7	2009.6
130°	674.8	736.3	1082.7	1652.6	1907.2
132.5°	700.8	760.6	1082.7	1601.8	1836.0
135°	737.7	799.2	1078.4	1529.8	1729.3
137.5°	772.4	832.2	1077.9	1468.9	1641.2
140°	798.5	860.0	1076.2	1418.4	1583.9
142.5°	828.0	879.3	1081.4	1378.1	1526.6
145°	870.1	914.6	1087.0	1324.1	1442.9
147.5°	906.1	949.4	1096.6	1269.5	1372.1
150°	937.3	967.0	1100.1	1251.4	1323.5
152.5°	961.6	993.0	1103.5	1227.0	1294.0
155°	993.7	1017.1	1113.1	1196.6	1245.4
157.5°	1033.7	1047.7	1115.2	1182.9	1217.7
160°	1054.5	1065.1	1123.9	1172.3	1202.0
162.5°	1066.6	1078.9	1125.7	1163.5	1186.4
165°	1097.9	1102.1	1126.1	1150.3	1167.3
167.5°	1119.1	1115.3	1136.1	1147.1	1153.9
170°	1126.1	1124.0	1132.6	1135.0	1143.4
172.5°	1141.7	1134.5	1137.8	1131.4	1138.2
175°	1150.0	1143.6	1139.1	1132.4	1123.9
177.5°	1153.4	1143.2	1137.8	1130.9	1132.6
180°	1141.3	1141.3	1141.3	1141.3	1141.3

(END OF REPORT)