

Scaled data based on original data using  
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State  
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: CORELITE

Report Number: P521686

Luminaire Tested: **SQ4-F-150U-100D-93050-1D-UNV-STD-W-4 (3000K)**

Issue Date: 5/5/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P521686  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2101-105-50,  
Test Lab: INNOVATION CENTER  
Issue Date: 5/5/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: SQ4-F-150U-100D-93050-1D-UNV-STD-W-4 (3000K)  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE  
DOWNLIGHT 1000 LUMENS PER FOOT  
UPLIGHT 1500 LUMENS PER FOOT  
Light Source: 3000K/5000K CCT, 90 CRI LEDS, TUNED TO 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

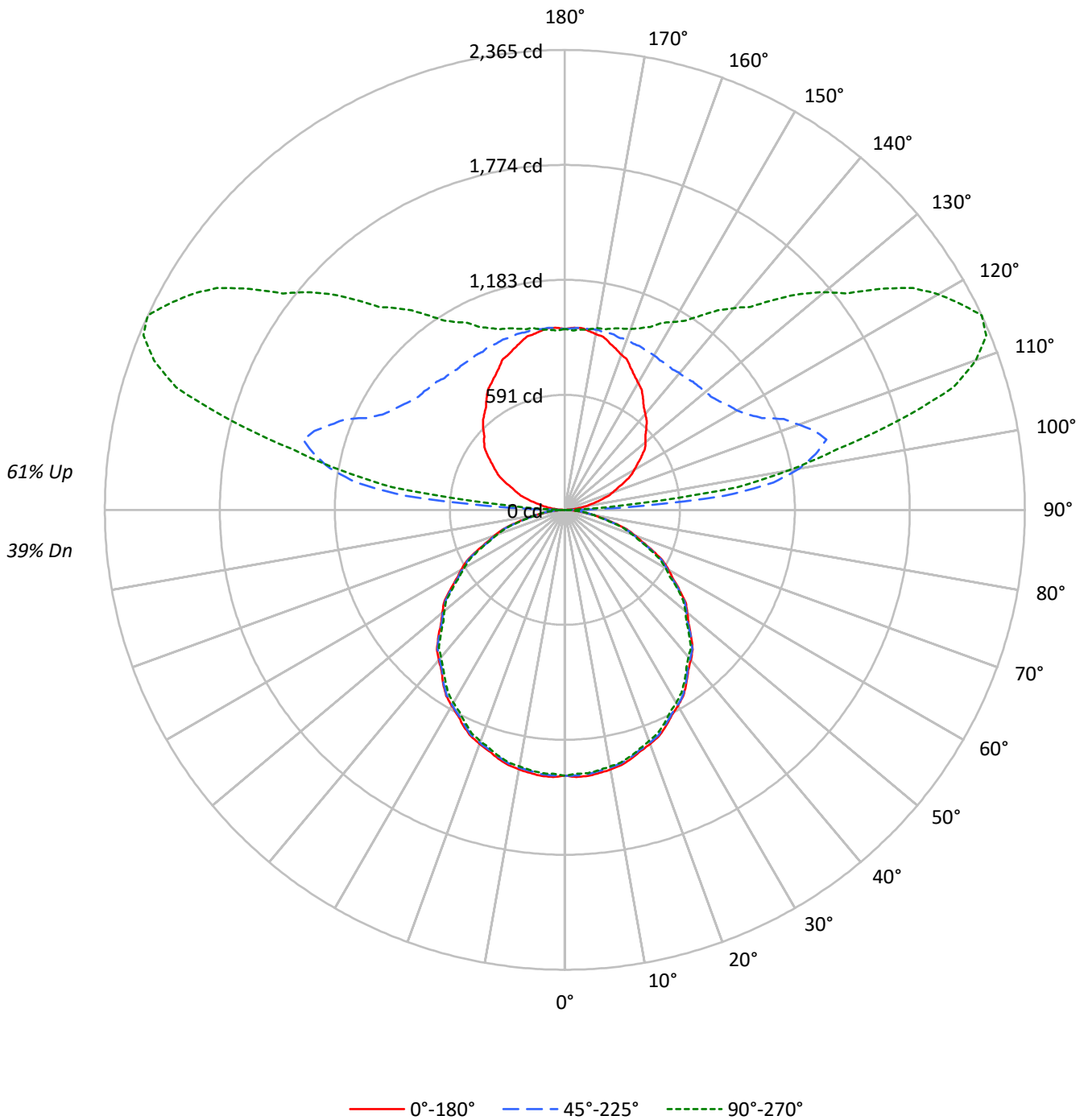
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 9921.8 lumens  
Efficiency: N/A  
Efficacy: 106.1 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): 93.5  
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	
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	105	105	105	105	95	95	95	95	77	77	77	61	61	61	46	46	46	39
1	95	91	87	84	86	83	80	77	68	65	63	54	52	51	41	40	39	33
2	87	79	73	68	78	72	67	63	59	55	52	47	44	42	36	34	33	27
3	79	70	62	56	71	63	57	52	52	47	44	41	38	35	31	29	27	23
4	72	61	54	48	65	56	49	44	46	41	37	37	33	30	28	26	24	20
5	66	55	46	41	60	50	43	38	41	36	32	33	29	26	25	23	20	17
6	61	49	41	35	55	45	38	32	37	32	28	30	26	23	23	20	18	15
7	56	44	36	31	51	40	33	28	33	28	24	27	23	20	21	18	16	13
8	52	40	32	27	47	36	30	25	30	25	21	24	21	18	19	16	14	12
9	48	36	29	24	44	33	27	22	28	23	19	22	19	16	17	15	13	10
10	45	33	26	21	41	30	24	20	25	20	17	21	17	14	16	13	11	9

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

	0°	45°	90°
0°	12610	12610	12610
5°	12722	12632	12586
10°	12704	12612	12557
15°	12644	12568	12531
20°	12582	12524	12428
25°	12506	12436	12326
30°	12387	12356	12210
35°	12278	12234	12080
40°	12137	12078	11913
45°	11983	11919	11753
50°	11788	11718	11605
55°	11585	11474	11348
60°	11317	11190	11027
65°	10946	10732	10540
70°	10324	10083	9900
75°	9407	9094	8919
80°	7715	7715	7715
85°	5505	6235	6542



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	129.4	1.3
10°-20°	370.6	3.7
20°-30°	560.6	5.6
30°-40°	675.1	6.8
40°-50°	701.1	7.1
50°-60°	636.3	6.4
60°-70°	485.5	4.9
70°-80°	271.4	2.7
80°-90°	70.7	0.7
90°-100°	479.4	4.8
100°-110°	1158.6	11.7
110°-120°	1235.7	12.5
120°-130°	1000.8	10.1
130°-140°	774.9	7.8
140°-150°	591.1	6.0
150°-160°	427.9	4.3
160°-170°	263.5	2.7
170°-180°	89.2	0.9
0°-30°	1060.6	10.7
0°-40°	1735.7	17.5
0°-60°	3073.2	31.0
0°-90°	3900.7	39.3
90°-120°	2873.6	29.0
90°-150°	5240.4	52.8
90°-180°	6021.0	60.7
0°-180°	9921.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1367	1367	1367	1367	1367	
5°	1374	1359	1364	1361	1359	130
15°	1324	1310	1316	1312	1312	373
25°	1228	1216	1222	1211	1211	566
35°	1090	1080	1086	1072	1072	681
45°	918	912	914	901	901	708
55°	720	718	713	706	706	644
65°	501	498	492	485	483	495
75°	264	260	255	251	250	277
85°	52	57	59	60	62	64
90°	0	0	0	0	0	4
95°	47	240	821	534	374	53
105°	185	320	1392	1802	1778	196
115°	339	433	1119	2121	2365	335
125°	482	556	971	1687	1981	431
135°	593	662	932	1330	1530	458
145°	701	753	914	1131	1219	438
155°	804	838	926	1001	1038	371
165°	888	902	938	952	965	251
175°	940	936	940	932	930	89
180°	930	930	930	930	930	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1366.8	1366.8	1366.8	1366.8	1366.8
2.5°	1375.5	1363.9	1367.6	1365.9	1359.0
5°	1373.7	1359.3	1363.9	1360.9	1359.0
7.5°	1364.7	1350.3	1354.9	1350.9	1349.8
10°	1356.0	1341.6	1346.2	1342.3	1340.3
12.5°	1344.3	1330.6	1335.2	1330.5	1330.1
15°	1323.7	1310.2	1315.8	1311.9	1311.9
17.5°	1299.5	1287.0	1292.8	1287.1	1286.2
20°	1281.5	1269.0	1275.6	1266.7	1265.8
22.5°	1261.1	1249.3	1255.2	1244.8	1245.4
25°	1228.5	1216.0	1221.6	1210.8	1210.8
27.5°	1191.0	1178.7	1185.7	1172.7	1172.0
30°	1162.7	1151.2	1159.8	1146.1	1146.1
32.5°	1134.5	1124.5	1130.7	1117.7	1115.4
35°	1090.1	1080.5	1086.2	1072.5	1072.5
37.5°	1041.5	1033.6	1036.6	1023.9	1026.7
40°	1007.7	999.1	1002.8	990.0	989.1
42.5°	973.2	965.3	968.3	955.6	958.4
45°	918.4	911.7	913.5	900.8	900.8
47.5°	862.9	857.9	856.4	845.1	847.0
50°	821.3	819.4	816.4	806.6	808.5
52.5°	783.6	779.4	775.5	766.5	767.7
55°	720.2	718.3	713.3	705.5	705.5
57.5°	659.6	655.3	649.6	641.5	641.5
60°	613.3	611.3	606.4	597.6	597.6
62.5°	569.3	566.6	560.9	552.8	552.0
65°	501.4	497.6	491.6	484.7	482.8
67.5°	430.6	426.5	421.7	415.2	414.1
70°	382.7	377.9	373.8	368.9	367.0
72.5°	334.0	331.5	326.7	321.8	320.7
75°	263.9	260.1	255.1	251.2	250.2
77.5°	190.0	189.4	187.6	185.1	186.0
80°	145.2	146.2	145.2	144.3	145.2
82.5°	105.2	107.7	107.5	107.4	108.3
85°	52.0	56.8	58.9	59.9	61.8
87.5°	14.9	19.5	23.5	24.4	25.1
90°	0.0	0.0	0.0	0.0	0.0
92.5°	15.8	129.8	305.7	148.6	100.8
95°	47.3	239.8	821.3	534.1	374.2
97.5°	83.9	265.7	1081.7	1042.1	894.6
100°	112.3	281.7	1225.1	1293.2	1171.9
102.5°	139.1	296.2	1319.6	1502.3	1430.3
105°	185.1	319.9	1392.5	1801.6	1778.5
107.5°	230.4	347.9	1349.5	2041.7	2096.0
110°	262.0	371.7	1280.2	2145.2	2247.3



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	293.5	395.5	1218.8	2170.5	2345.0
115°	338.8	433.1	1118.7	2120.9	2365.4
117.5°	383.7	472.6	1060.0	2006.8	2293.4
120°	413.6	496.4	1022.2	1917.3	2217.7
122.5°	445.1	521.8	998.6	1825.8	2121.6
125°	482.5	555.7	971.0	1686.7	1981.4
127.5°	519.6	588.5	951.7	1568.9	1827.7
130°	541.6	609.0	945.4	1486.9	1741.1
132.5°	562.1	632.6	935.9	1427.7	1643.4
135°	592.8	662.2	931.6	1330.1	1530.3
137.5°	622.0	691.7	917.8	1263.9	1414.9
140°	644.0	707.6	917.8	1216.4	1355.1
142.5°	666.1	729.7	909.9	1174.9	1292.0
145°	701.2	753.2	913.9	1130.6	1219.2
147.5°	733.9	784.3	911.5	1079.4	1152.6
150°	754.3	798.6	917.8	1057.0	1114.8
152.5°	776.4	819.2	916.2	1033.2	1084.8
155°	803.6	838.2	925.7	1001.4	1038.0
157.5°	836.3	865.9	923.7	989.2	1010.8
160°	848.9	873.9	931.6	973.3	988.7
162.5°	869.4	891.3	928.4	968.4	977.7
165°	888.3	901.8	937.5	951.6	965.1
167.5°	911.5	920.4	935.1	950.5	950.9
170°	917.8	923.6	941.4	939.7	949.3
172.5°	928.8	933.1	936.7	940.9	935.1
175°	939.5	935.6	939.5	931.6	929.6
177.5°	937.5	937.5	934.4	931.0	923.3
180°	929.6	929.6	929.6	929.6	929.6

(END OF REPORT)