

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

(formerly Eaton)

Brand: CORELITE

Report Number: P520424

Luminaire Tested: **SQ4-F-150U-100D-930-1D-UNV-STD-W-4**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P520424  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-25, G3-1910-536-19)  
Test Lab: INNOVATION CENTER  
Issue Date: 4/29/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: SQ4-F-150U-100D-930-1D-UNV-STD-W-4  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE  
DOWNLIGHT 1000 LUMENS PER FOOT  
UPLIGHT 1500 LUMENS PER FOOT  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

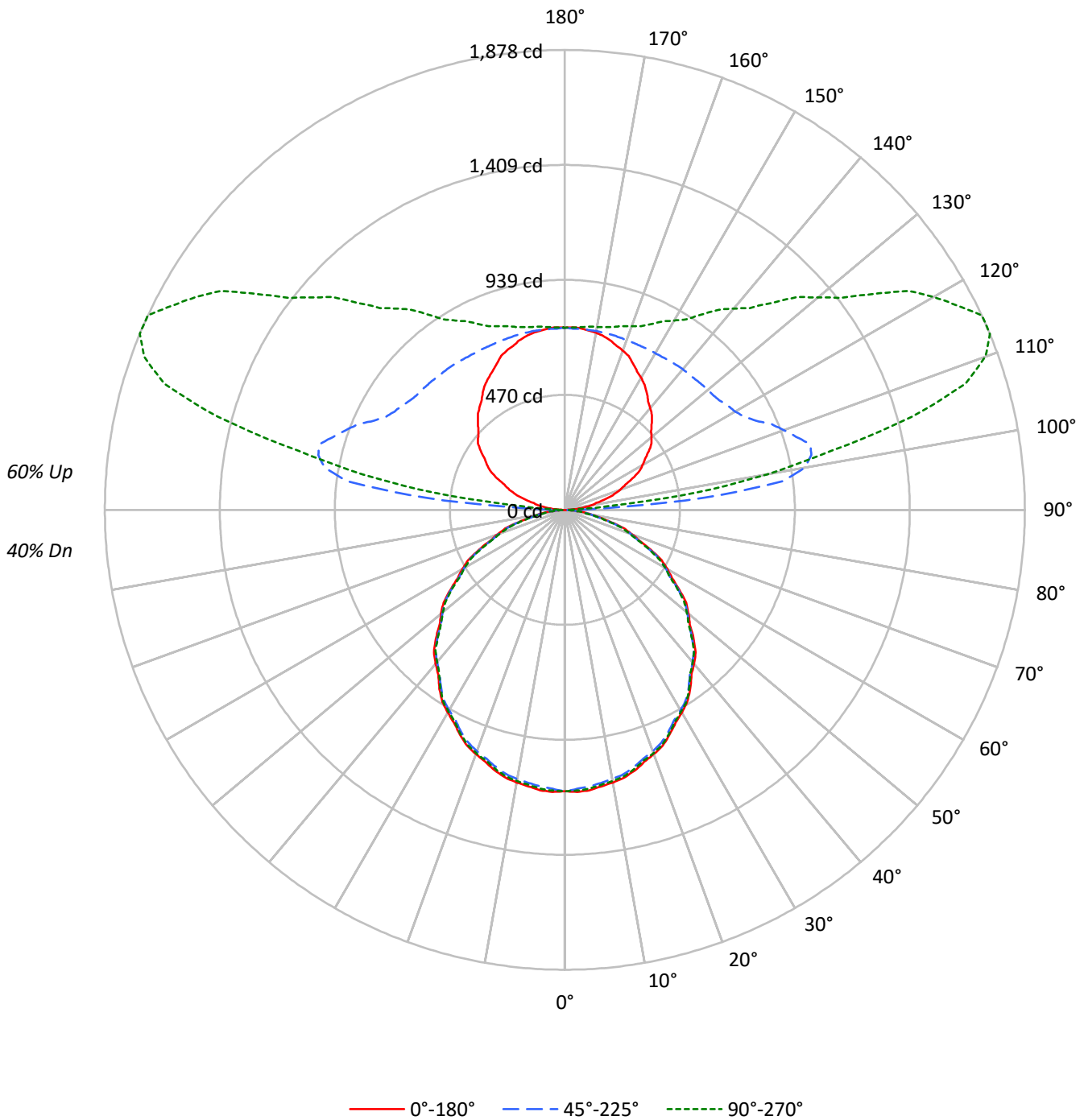
Lumens per Lamp: N/A  
Luminaire Lumens: 7928.4 lumens  
Efficiency: N/A  
Efficacy: 109.7 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35  
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')  
CIE Type: Semi-Indirect

Input Watts (W): 72.3  
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	0
RCR																		
0	105	105	105	105	95	95	95	95	78	78	78	61	61	61	47	47	47	40
1	95	91	87	84	87	83	80	77	68	66	64	54	52	51	41	40	39	33
2	87	80	73	68	79	73	67	63	59	56	52	47	45	42	36	34	33	28
3	79	70	63	57	72	64	57	52	52	48	44	42	39	36	32	30	28	23
4	72	62	54	48	65	56	50	44	46	41	37	37	33	31	28	26	24	20
5	66	55	47	41	60	50	43	38	41	36	32	33	29	26	26	23	21	17
6	61	49	41	35	55	45	38	33	37	32	28	30	26	23	23	20	18	15
7	56	44	36	31	51	41	34	29	34	28	24	27	23	20	21	18	16	13
8	52	40	32	27	47	37	30	25	31	25	22	25	21	18	19	17	14	12
9	48	36	29	24	44	34	27	22	28	23	19	23	19	16	18	15	13	11
10	45	33	26	21	41	31	24	20	26	21	17	21	17	15	16	14	12	10

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

	0°	45°	90°
0°	10599	10599	10599
5°	10647	10501	10580
10°	10592	10460	10541
15°	10529	10385	10468
20°	10420	10296	10381
25°	10305	10185	10267
30°	10180	10071	10122
35°	10052	9928	9981
40°	9886	9771	9781
45°	9711	9577	9547
50°	9462	9348	9325
55°	9182	9082	9017
60°	8903	8743	8715
65°	8468	8281	8211
70°	7869	7680	7529
75°	7026	6802	6662
80°	5781	5568	5324
85°	3419	3758	3843



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	108.4	1.4
10°-20°	308.8	3.9
20°-30°	463.7	5.8
30°-40°	553.3	7.0
40°-50°	567.2	7.2
50°-60°	505.1	6.4
60°-70°	376.5	4.7
70°-80°	203.8	2.6
80°-90°	47.9	0.6
90°-100°	345.5	4.4
100°-110°	934.2	11.8
110°-120°	982.2	12.4
120°-130°	797.8	10.1
130°-140°	625.8	7.9
140°-150°	480.3	6.1
150°-160°	345.5	4.4
160°-170°	211.0	2.7
170°-180°	71.1	0.9
0°-30°	880.9	11.1
0°-40°	1434.2	18.1
0°-60°	2506.5	31.6
0°-90°	3134.8	39.5
90°-120°	2262.0	28.5
90°-150°	4166.0	52.5
90°-180°	4794.0	60.5
0°-180°	7928.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1149	1149	1149	1149	1149	
5°	1150	1147	1134	1144	1142	109
15°	1102	1098	1087	1096	1096	311
25°	1012	1010	1000	1006	1008	466
35°	892	889	882	883	886	557
45°	744	740	734	730	732	573
55°	571	572	565	559	561	511
65°	388	386	379	375	376	384
75°	197	195	191	187	187	210
85°	32	35	36	36	36	45
90°	2	5	10	11	10	4
95°	54	188	575	297	177	56
105°	174	268	1036	1529	1466	183
115°	306	374	860	1664	1878	302
125°	419	480	775	1307	1536	373
135°	502	561	754	1056	1195	388
145°	584	627	744	904	972	365
155°	659	684	737	810	837	304
165°	717	724	740	769	773	202
175°	744	744	741	751	749	71
180°	744	744	744	744	744	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1148.8	1148.8	1148.8	1148.8	1148.8
2.5°	1153.2	1150.7	1140.5	1148.8	1147.5
5°	1149.6	1147.3	1133.8	1144.0	1142.4
7.5°	1138.9	1136.6	1124.7	1134.1	1132.7
10°	1130.6	1128.3	1116.5	1125.9	1125.1
12.5°	1119.9	1117.6	1105.8	1115.2	1114.4
15°	1102.3	1098.4	1087.2	1095.9	1095.9
17.5°	1078.9	1076.0	1065.6	1073.0	1073.1
20°	1061.3	1059.0	1048.7	1056.5	1057.3
22.5°	1043.6	1041.3	1029.8	1037.0	1038.4
25°	1012.3	1010.0	1000.5	1006.1	1008.5
27.5°	980.2	976.9	967.4	972.4	974.1
30°	955.6	954.1	945.3	947.8	950.1
32.5°	929.8	928.2	920.8	922.0	926.1
35°	892.5	888.7	881.5	883.1	886.2
37.5°	848.5	846.7	839.7	838.8	841.7
40°	820.8	817.7	811.3	809.8	812.1
42.5°	790.5	787.4	779.8	778.3	781.2
45°	744.3	740.4	734.0	730.1	731.7
47.5°	692.6	692.6	685.9	681.4	683.8
50°	659.2	659.2	651.3	647.4	649.7
52.5°	624.4	625.1	616.6	614.5	613.7
55°	570.8	571.6	564.6	559.0	560.6
57.5°	519.1	517.4	509.2	505.6	506.3
60°	482.5	480.3	473.8	468.5	472.3
62.5°	445.3	444.3	437.9	431.7	431.3
65°	387.9	386.4	379.3	375.3	376.1
67.5°	330.8	329.0	322.5	316.9	318.8
70°	291.7	291.7	284.7	281.4	279.1
72.5°	255.7	252.7	247.4	242.9	241.3
75°	197.1	194.8	190.8	186.9	186.9
77.5°	143.5	141.5	138.9	136.2	135.4
80°	108.8	108.0	104.8	104.0	100.2
82.5°	76.6	76.5	74.6	72.5	72.4
85°	32.3	35.4	35.5	36.3	36.3
87.5°	5.9	10.3	10.9	9.8	9.6
90°	1.6	4.7	10.4	11.2	10.4
92.5°	22.7	82.8	163.5	70.9	51.4
95°	53.6	188.2	574.6	297.4	176.9
97.5°	86.1	215.9	895.7	741.3	544.3
100°	110.5	227.1	995.6	1038.3	839.5
102.5°	132.9	242.5	1030.8	1263.5	1114.8
105°	173.6	268.4	1036.4	1528.8	1466.2
107.5°	211.5	297.9	991.1	1694.3	1715.1
110°	240.9	319.1	950.8	1738.7	1827.2



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	267.2	340.4	913.6	1729.8	1878.4
115°	305.7	373.8	859.5	1663.9	1878.4
117.5°	343.5	407.3	823.8	1563.3	1806.3
120°	366.6	429.2	802.7	1491.1	1739.0
122.5°	388.3	449.7	789.9	1413.6	1663.5
125°	418.6	479.6	774.7	1307.3	1535.8
127.5°	446.5	506.3	765.8	1220.6	1421.6
130°	461.7	523.6	761.9	1166.9	1348.5
132.5°	477.7	539.0	758.1	1118.7	1285.8
135°	501.8	561.2	753.9	1055.6	1194.9
137.5°	525.9	582.2	750.4	1004.4	1117.9
140°	542.6	595.0	749.1	971.5	1072.4
142.5°	558.6	607.9	746.5	941.7	1030.1
145°	583.5	627.2	743.5	903.5	972.4
147.5°	606.0	644.8	740.0	868.9	921.8
150°	622.6	657.1	738.7	850.1	892.3
152.5°	638.0	668.1	738.1	832.7	867.4
155°	658.6	684.5	737.1	810.5	837.2
157.5°	680.1	698.2	737.3	795.1	812.6
160°	692.3	707.1	737.9	785.4	797.9
162.5°	701.9	714.3	738.5	777.6	787.0
165°	717.1	724.1	740.3	769.2	773.1
167.5°	727.5	732.4	740.4	761.9	763.8
170°	733.9	736.3	741.1	758.7	758.7
172.5°	739.0	739.5	741.1	754.9	754.2
175°	744.3	743.5	741.1	750.7	749.1
177.5°	746.0	744.1	740.9	747.2	745.4
180°	743.5	743.5	743.5	743.5	743.5

(END OF REPORT)