

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: P519898

Luminaire Tested: **SQ4-F-050U-050D-930-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P519898  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-21, G3-1910-536-17)  
Test Lab: INNOVATION CENTER  
Issue Date: 4/29/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: SQ4-F-050U-050D-930-1D-UNV-STD-W-8  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE  
DOWNLIGHT 500 LUMENS PER FOOT  
UPLIGHT 500 LUMENS PER FOOT  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

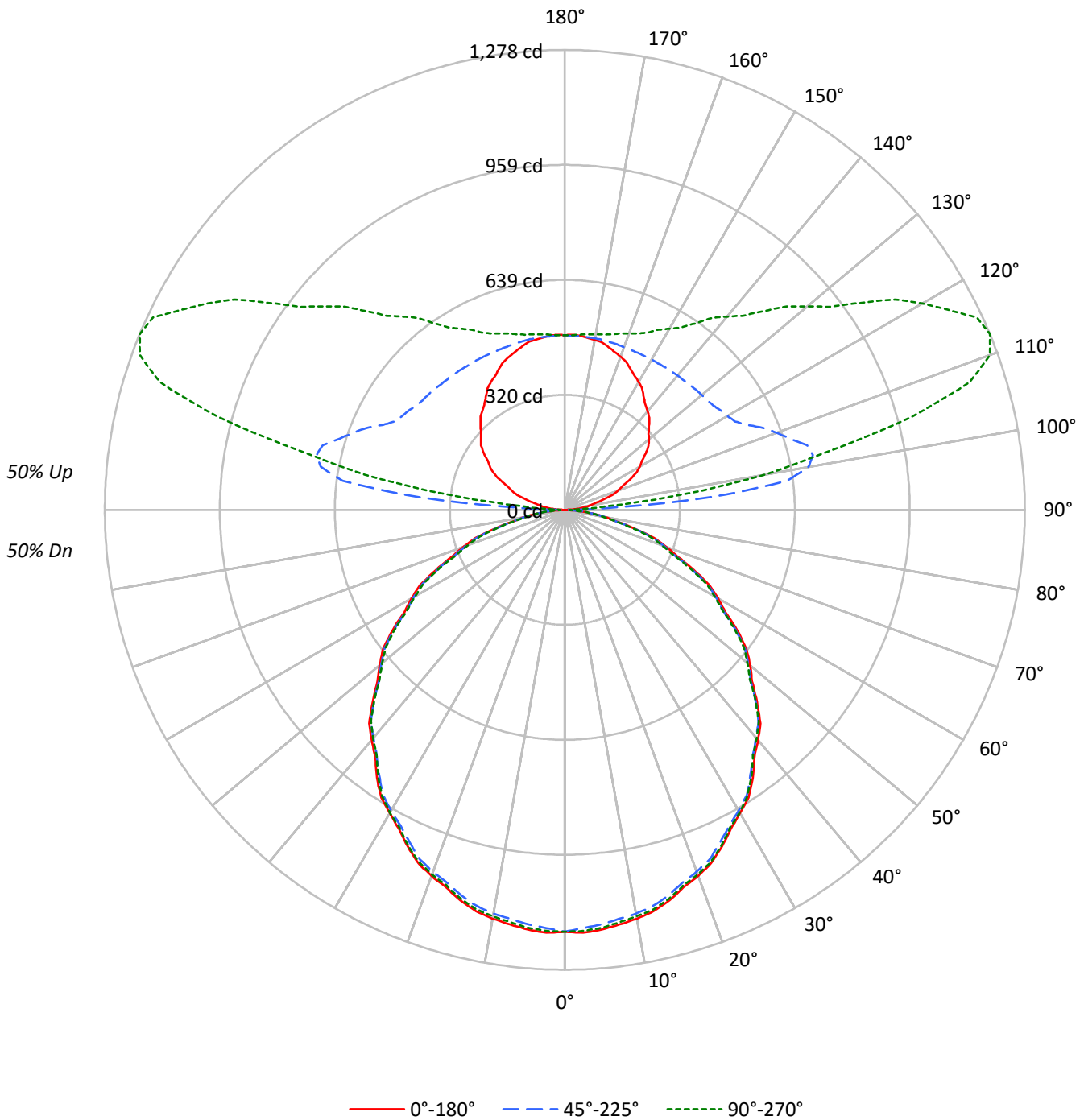
Lumens per Lamp: N/A  
Luminaire Lumens: 6371.5 lumens  
Efficiency: N/A  
Efficacy: 108.9 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35  
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')  
CIE Type: General Diffuse

Input Watts (W): 58.5  
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



TEST NUMBER: P519898  
CATALOG NUMBER: SQ4-F-050U-050D-930-1D-UNV-STD-W-8

### Luminous Intensity Polar Plot





TEST NUMBER: P519898

CATALOG NUMBER: SQ4-F-050U-050D-930-1D-UNV-STD-W-8

**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	107	107	107	107	99	99	99	99	83	83	83	69	69	69	56	56	56	50
1	98	93	90	86	90	86	83	80	73	71	69	61	59	58	50	49	48	42
2	89	82	75	70	82	75	70	66	64	60	57	53	51	48	44	42	40	35
3	81	72	64	58	75	66	60	55	56	51	47	47	44	41	39	36	34	30
4	74	63	55	49	68	59	52	46	50	45	40	42	38	35	34	32	29	25
5	68	56	48	42	62	52	45	40	45	39	35	38	33	30	31	28	25	22
6	63	50	42	36	58	47	40	34	40	34	30	34	30	26	28	25	22	19
7	58	46	38	32	53	42	35	30	36	31	27	31	26	23	26	22	20	17
8	54	41	33	28	49	38	31	27	33	28	24	28	24	21	23	20	18	15
9	50	38	30	25	46	35	28	24	30	25	21	26	22	18	22	18	16	14
10	47	35	27	22	43	32	26	21	28	23	19	24	20	17	20	17	14	12

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

	0°	45°	90°
0°	5408	5408	5408
5°	5421	5355	5399
10°	5403	5337	5374
15°	5366	5299	5344
20°	5316	5254	5293
25°	5256	5192	5240
30°	5182	5141	5174
35°	5126	5064	5090
40°	5028	4980	4990
45°	4924	4883	4883
50°	4821	4775	4752
55°	4707	4645	4620
60°	4532	4460	4430
65°	4317	4231	4180
70°	4022	3937	3853
75°	3608	3495	3413
80°	2917	2877	2792
85°	1741	1995	2075



TEST NUMBER: P519898

CATALOG NUMBER: SQ4-F-050U-050D-930-1D-UNV-STD-W-8

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	110.6	1.7
10°-20°	315.0	4.9
20°-30°	473.1	7.4
30°-40°	564.7	8.9
40°-50°	578.7	9.1
50°-60°	516.1	8.1
60°-70°	384.4	6.0
70°-80°	208.7	3.3
80°-90°	50.2	0.8
90°-100°	233.1	3.7
100°-110°	633.2	9.9
110°-120°	651.0	10.2
120°-130°	520.5	8.2
130°-140°	409.0	6.4
140°-150°	313.6	4.9
150°-160°	225.5	3.5
160°-170°	137.9	2.2
170°-180°	46.5	0.7
0°-30°	898.7	14.1
0°-40°	1463.4	23.0
0°-60°	2558.2	40.1
0°-90°	3201.3	50.2
90°-120°	1517.2	23.8
90°-150°	2760.3	43.3
90°-180°	3170.0	49.8
0°-180°	6371.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1172	1172	1172	1172	1172	
5°	1171	1169	1156	1168	1166	111
15°	1124	1121	1110	1119	1119	317
25°	1033	1030	1020	1026	1029	475
35°	910	907	899	899	904	568
45°	755	756	748	747	748	583
55°	585	585	578	573	574	521
65°	396	394	388	383	383	392
75°	202	201	196	193	192	214
85°	33	36	38	39	39	46
90°	2	6	11	14	14	3
95°	34	128	406	177	119	36
105°	112	175	696	1060	998	119
115°	200	243	557	1109	1263	197
125°	275	313	504	850	1002	245
135°	331	368	490	692	781	256
145°	382	410	484	588	632	240
155°	432	448	481	528	543	199
165°	468	474	482	503	504	132
175°	486	487	484	490	489	46
180°	486	486	486	486	486	



TEST NUMBER: P519898

CATALOG NUMBER: SQ4-F-050U-050D-930-1D-UNV-STD-W-8

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1172.3	1172.3	1172.3	1172.3	1172.3
2.5°	1176.1	1173.6	1163.4	1172.2	1171.0
5°	1170.7	1169.2	1156.5	1167.5	1166.0
7.5°	1162.3	1159.2	1146.9	1157.5	1156.0
10°	1153.5	1150.3	1139.3	1148.7	1147.2
12.5°	1142.1	1140.3	1128.0	1137.4	1137.1
15°	1123.6	1120.6	1109.5	1118.9	1118.9
17.5°	1099.2	1097.3	1086.6	1095.7	1094.4
20°	1082.8	1079.7	1070.3	1078.2	1078.2
22.5°	1062.8	1060.9	1051.4	1058.0	1059.3
25°	1032.6	1029.5	1020.1	1026.4	1029.4
27.5°	999.4	996.9	989.0	993.2	995.2
30°	972.9	972.9	965.2	966.8	971.4
32.5°	949.1	949.1	940.0	941.7	943.8
35°	910.2	907.2	899.2	899.3	903.9
37.5°	865.0	863.5	858.5	857.5	858.8
40°	834.9	833.3	827.0	828.6	828.6
42.5°	804.7	803.2	796.9	794.8	797.2
45°	754.8	756.4	748.5	747.0	748.5
47.5°	705.5	705.5	699.3	695.0	697.4
50°	671.7	671.7	665.4	662.2	662.2
52.5°	636.5	637.8	630.2	625.9	627.1
55°	585.3	585.3	577.5	572.8	574.4
57.5°	528.8	528.8	521.0	516.4	519.2
60°	491.2	491.2	483.4	478.6	480.2
62.5°	453.5	453.5	445.7	441.0	441.3
65°	395.5	393.9	387.6	382.9	382.9
67.5°	339.6	335.7	330.8	324.5	324.5
70°	298.2	296.6	291.9	285.7	285.7
72.5°	260.5	257.8	253.0	248.0	248.0
75°	202.4	200.9	196.1	193.0	191.5
77.5°	145.0	143.8	143.5	139.0	140.3
80°	109.8	109.8	108.3	105.1	105.1
82.5°	78.5	79.7	76.9	76.2	75.0
85°	32.9	36.0	37.7	39.2	39.2
87.5°	6.6	11.2	10.9	12.8	12.8
90°	1.6	6.2	10.9	14.0	14.0
92.5°	14.0	63.8	110.9	47.6	40.2
95°	34.3	127.5	405.9	176.6	118.6
97.5°	56.8	140.8	622.3	484.2	340.0
100°	71.8	149.6	688.5	697.9	563.6
102.5°	86.8	158.6	705.9	863.1	744.7
105°	112.4	175.0	696.3	1060.2	997.6
107.5°	139.0	194.2	656.0	1161.9	1179.3
110°	157.7	208.0	626.1	1182.0	1256.7

TEST NUMBER: P519898

CATALOG NUMBER: SQ4-F-050U-050D-930-1D-UNV-STD-W-8

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	173.9	221.9	596.0	1165.4	1278.0
115°	199.8	242.6	557.4	1108.9	1263.0
117.5°	224.2	265.1	532.6	1028.7	1202.5
120°	240.4	280.2	521.5	975.0	1147.5
122.5°	254.2	293.9	513.9	921.1	1087.6
125°	274.8	312.9	504.3	849.6	1002.3
127.5°	293.2	331.1	499.0	795.4	926.4
130°	304.4	341.1	496.4	761.4	878.9
132.5°	315.7	352.3	494.0	732.3	836.4
135°	331.0	367.6	490.3	692.1	780.6
137.5°	347.5	380.8	488.4	656.5	731.0
140°	357.5	389.6	487.1	633.8	700.9
142.5°	367.5	397.1	485.8	616.1	672.3
145°	382.5	410.0	484.0	588.0	632.2
147.5°	399.4	422.8	482.4	565.9	600.7
150°	410.6	430.4	482.4	553.2	580.7
152.5°	419.3	436.8	481.1	542.0	564.5
155°	432.5	447.8	480.8	528.0	543.3
157.5°	445.2	457.2	480.8	518.6	530.2
160°	452.8	463.5	480.8	512.2	521.5
162.5°	460.2	468.5	482.1	507.2	513.9
165°	468.4	474.5	482.4	502.7	504.3
167.5°	476.8	479.8	484.0	497.4	498.7
170°	479.3	482.3	484.0	494.9	494.9
172.5°	481.8	483.6	484.0	492.4	492.4
175°	485.5	487.0	484.0	490.2	488.7
177.5°	486.8	486.8	483.0	488.0	485.5
180°	485.5	485.5	485.5	485.5	485.5

(END OF REPORT)