

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: P520208

Luminaire Tested: **SQ4-F-100U-075D-930-1D-UNV-STD-W-4**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P520208  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-23, G3-1910-536-18)  
Test Lab: INNOVATION CENTER  
Issue Date: 4/29/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: SQ4-F-100U-075D-930-1D-UNV-STD-W-4  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE  
DOWNLIGHT 750 LUMENS PER FOOT  
UPLIGHT 1000 LUMENS PER FOOT  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

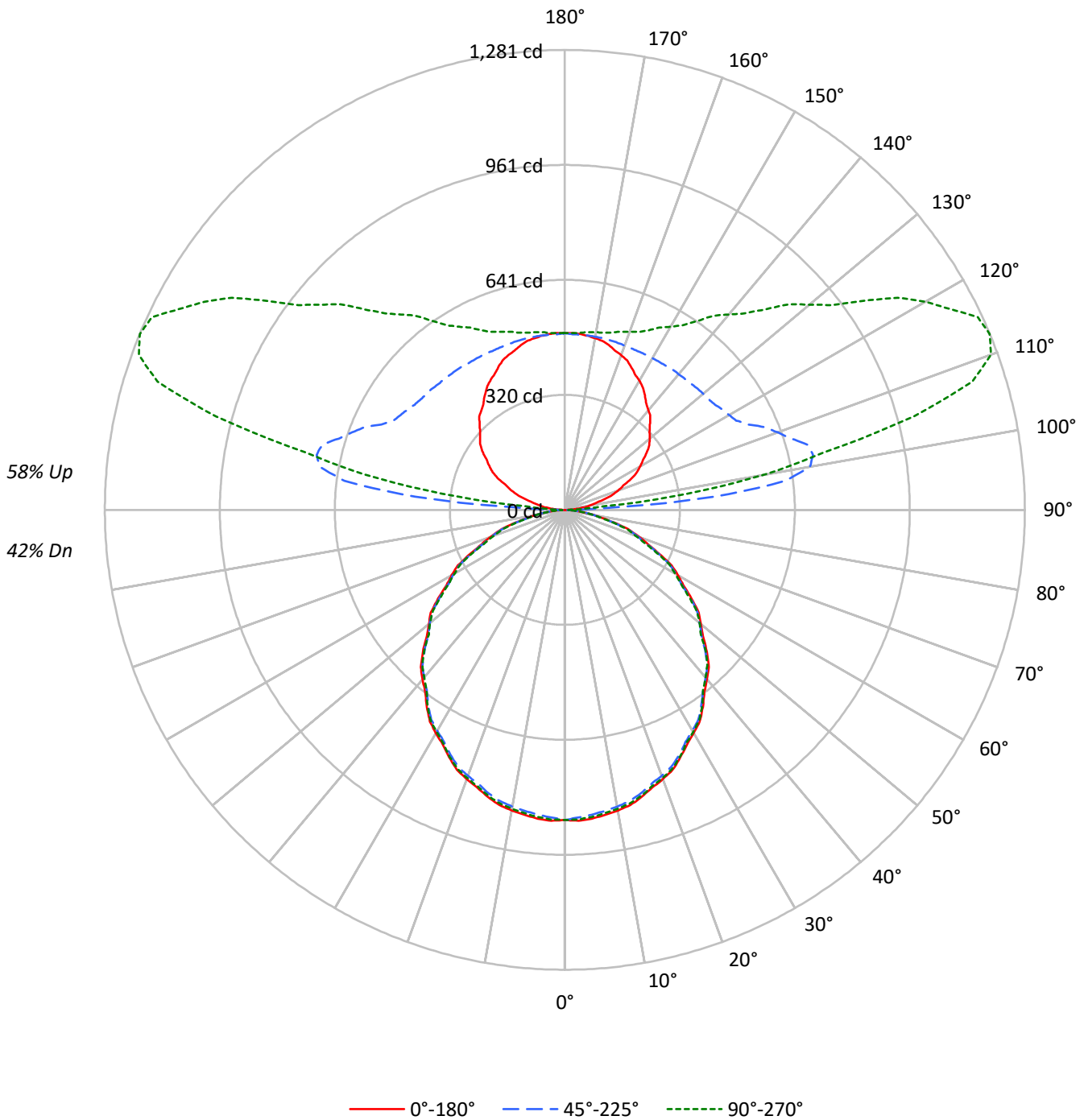
Lumens per Lamp: N/A  
Luminaire Lumens: 5554.9 lumens  
Efficiency: N/A  
Efficacy: 113.1 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35  
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')  
CIE Type: General Diffuse

Input Watts (W): 49.1  
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	96	96	96	96	79	79	79	64	64	64	49	49	49	42
1	96	92	88	84	88	84	81	78	69	67	65	56	54	53	43	42	42	36
2	87	80	74	69	80	73	68	64	61	57	54	49	46	44	38	36	35	30
3	80	70	63	57	72	64	58	53	53	49	45	43	40	37	34	31	30	25
4	73	62	54	48	66	57	50	45	47	42	38	38	35	32	30	28	25	22
5	67	55	47	41	61	51	44	38	42	37	33	34	30	27	27	24	22	19
6	61	49	41	36	56	45	38	33	38	33	29	31	27	24	24	22	19	16
7	57	45	37	31	52	41	34	29	34	29	25	28	24	21	22	19	17	14
8	53	40	33	27	48	37	30	26	31	26	22	26	22	19	20	18	15	13
9	49	37	29	24	45	34	27	23	29	23	20	24	20	17	19	16	14	12
10	46	34	27	22	42	31	25	20	26	21	18	22	18	15	17	15	12	10

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

	0°	45°	90°
0°	7969	7969	7969
5°	7999	7898	7956
10°	7967	7865	7923
15°	7906	7809	7875
20°	7835	7742	7804
25°	7749	7669	7725
30°	7650	7567	7608
35°	7550	7471	7506
40°	7423	7347	7337
45°	7295	7204	7223
50°	7092	7036	7036
55°	6928	6840	6777
60°	6704	6589	6532
65°	6342	6224	6137
70°	5956	5808	5662
75°	5361	5165	5051
80°	4288	4203	4160
85°	2572	2911	2975



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	81.5	1.5
10°-20°	232.1	4.2
20°-30°	348.7	6.3
30°-40°	416.1	7.5
40°-50°	426.7	7.7
50°-60°	380.2	6.8
60°-70°	283.5	5.1
70°-80°	153.7	2.8
80°-90°	36.4	0.7
90°-100°	230.3	4.1
100°-110°	635.9	11.4
110°-120°	655.8	11.8
120°-130°	527.0	9.5
130°-140°	414.2	7.5
140°-150°	317.7	5.7
150°-160°	228.3	4.1
160°-170°	139.6	2.5
170°-180°	47.1	0.8
0°-30°	662.3	11.9
0°-40°	1078.4	19.4
0°-60°	1885.3	33.9
0°-90°	2359.0	42.5
90°-120°	1522.1	27.4
90°-150°	2781.0	50.1
90°-180°	3196.0	57.5
0°-180°	5554.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	864	864	864	864	864	
5°	864	862	853	860	859	82
15°	828	826	818	824	824	233
25°	761	760	753	757	759	351
35°	670	669	663	663	666	419
45°	559	557	552	552	554	430
55°	431	430	425	421	421	385
65°	290	290	285	282	281	289
75°	150	147	145	142	142	158
85°	24	26	28	28	28	34
90°	2	3	6	7	8	3
95°	34	125	418	172	112	36
105°	113	175	700	1068	1006	121
115°	203	245	564	1116	1269	200
125°	279	317	511	864	1014	248
135°	335	372	497	700	789	259
145°	389	416	490	596	641	243
155°	438	453	486	535	552	202
165°	474	481	489	508	512	134
175°	492	493	490	497	495	47
180°	492	492	492	492	492	



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CATALOG NUMBER: SQ4-F-100U-075D-930-1D-UNV-STD-W-4

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	863.7	863.7	863.7	863.7	863.7
2.5°	866.9	865.0	857.5	863.7	863.1
5°	863.7	862.2	852.8	859.8	859.0
7.5°	856.7	855.0	845.7	852.8	852.6
10°	850.4	848.2	839.5	846.5	845.7
12.5°	842.3	840.0	831.3	838.3	837.5
15°	827.7	826.2	817.6	823.9	824.5
17.5°	811.1	808.2	800.4	806.5	807.3
20°	798.0	795.6	788.5	794.0	794.8
22.5°	784.2	781.8	774.8	780.3	781.0
25°	761.2	760.4	753.3	757.2	758.8
27.5°	736.3	734.1	728.4	731.5	732.9
30°	718.1	716.6	710.3	712.7	714.1
32.5°	699.3	698.4	692.7	693.9	696.0
35°	670.3	668.8	663.3	663.4	666.4
37.5°	638.2	636.5	632.0	631.2	632.5
40°	616.3	614.0	610.0	609.2	609.2
42.5°	593.7	592.0	586.8	585.4	587.3
45°	559.1	556.8	552.1	552.1	553.6
47.5°	521.7	520.8	515.3	512.8	513.4
50°	494.1	495.7	490.2	487.1	490.2
52.5°	470.3	469.4	464.5	461.4	462.6
55°	430.7	429.9	425.2	421.3	421.3
57.5°	390.9	388.9	384.0	381.1	383.4
60°	363.3	362.6	357.1	351.6	354.0
62.5°	335.8	334.4	328.9	325.3	327.0
65°	290.5	290.5	285.1	281.9	281.1
67.5°	250.9	247.2	244.1	240.4	239.3
70°	220.8	217.8	215.3	212.2	209.9
72.5°	191.4	189.5	185.9	182.7	182.3
75°	150.4	147.3	144.9	142.5	141.7
77.5°	107.0	106.4	104.1	102.9	103.3
80°	80.7	80.7	79.1	79.1	78.3
82.5°	56.9	57.5	57.2	55.9	55.8
85°	24.3	25.8	27.5	27.5	28.1
87.5°	4.7	8.1	8.2	8.3	8.5
90°	1.6	3.1	6.3	7.1	7.9
92.5°	14.1	58.8	105.2	38.4	29.9
95°	33.8	124.6	417.9	171.8	111.8
97.5°	56.0	139.6	619.1	476.6	345.1
100°	72.4	148.6	693.3	698.3	567.4
102.5°	88.1	158.8	707.9	862.7	738.6
105°	113.4	174.9	699.7	1068.2	1005.8
107.5°	140.1	194.9	660.6	1167.2	1189.9
110°	159.0	208.2	630.4	1188.5	1262.3



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CATALOG NUMBER: SQ4-F-100U-075D-930-1D-UNV-STD-W-4

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	176.0	223.4	602.0	1171.6	1280.6
115°	203.1	245.3	563.5	1115.5	1268.7
117.5°	226.6	268.9	538.1	1036.5	1210.7
120°	242.4	283.9	528.0	983.0	1158.5
122.5°	257.5	297.3	519.9	933.1	1099.3
125°	278.6	317.0	510.7	864.4	1014.4
127.5°	296.6	335.0	505.4	806.3	935.8
130°	308.5	347.0	502.9	770.8	888.5
132.5°	319.8	356.5	500.3	740.9	847.7
135°	335.2	371.5	496.6	700.1	789.4
137.5°	352.6	385.5	494.7	665.8	742.0
140°	362.1	394.3	493.4	642.9	709.9
142.5°	372.7	402.6	492.2	622.6	681.6
145°	388.8	415.7	490.4	596.0	641.4
147.5°	404.2	427.7	488.6	573.5	608.9
150°	415.6	434.8	488.0	560.2	588.7
152.5°	424.4	442.4	487.3	548.8	572.4
155°	438.3	453.0	486.4	534.8	551.7
157.5°	451.3	462.6	486.5	524.6	536.2
160°	458.8	468.8	487.2	518.8	527.3
162.5°	465.1	473.9	487.8	513.8	520.3
165°	474.5	480.8	488.8	507.7	511.5
167.5°	481.8	485.5	489.6	504.0	505.3
170°	485.6	488.7	489.6	502.1	502.1
172.5°	488.8	490.6	489.6	499.6	499.0
175°	491.8	492.6	489.6	496.6	495.0
177.5°	493.1	492.5	489.4	493.7	492.5
180°	491.8	491.8	491.8	491.8	491.8

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