

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: P564938

Luminaire Tested: **SQ4-PW1-100U-075D-840-1D-UNV-STD-W-4**

Issue Date: 7/30/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P564938  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-23, G2-2106-289-3)  
Test Lab: INNOVATION CENTER  
Issue Date: 7/30/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: SQ4-PW1-100U-075D-840-1D-UNV-STD-W-4  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE WAVES CONTINUOUS LENS.  
DOWNLIGHT 750 LUMENS PER FOOT  
UPLIGHT 1000 LUMENS PER FOOT  
Light Source: 4000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

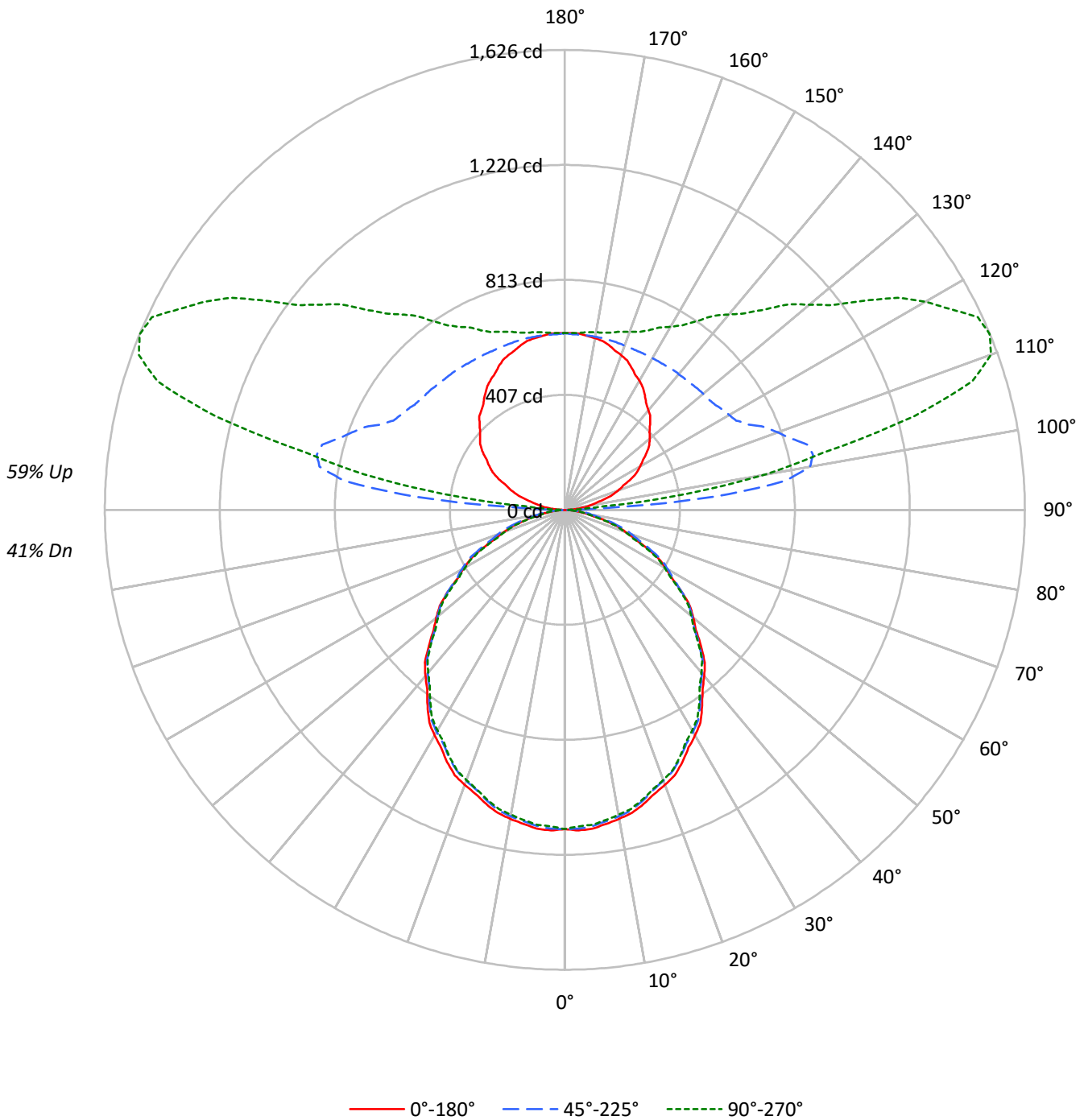
Lumens per Lamp: N/A  
Luminaire Lumens: 6928.3 lumens  
Efficiency: N/A  
Efficacy: 141.1 lumens/watt  
Spacing Criteria (0/90/45): 1.22 / 1.19 / 1.31  
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')  
CIE Type: General Diffuse

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	63	63	63	48	48	48	41
1	96	92	88	85	87	84	81	78	69	67	65	55	54	52	43	42	41	35
2	87	80	74	69	79	73	68	64	60	57	54	49	46	44	38	36	35	30
3	80	70	63	58	72	65	58	53	53	49	45	43	40	37	33	31	29	25
4	73	62	55	49	66	57	50	45	47	42	38	38	35	32	30	27	25	22
5	67	55	48	42	61	51	44	39	42	37	33	34	31	28	27	24	22	19
6	62	50	42	36	56	46	39	34	38	33	29	31	27	24	24	22	19	16
7	57	45	37	32	52	41	34	29	35	29	25	28	24	21	22	19	17	15
8	53	41	33	28	48	37	31	26	31	26	22	26	22	19	20	18	15	13
9	49	37	30	25	45	34	28	23	29	24	20	24	20	17	19	16	14	12
10	46	34	27	22	42	31	25	21	26	21	18	22	18	15	18	15	13	11

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

	0°	45°	90°
0°	10409	10409	10409
5°	10476	10393	10347
10°	10393	10308	10253
15°	10282	10168	10130
20°	10159	10003	9983
25°	10017	9835	9805
30°	9805	9657	9593
35°	9527	9392	9337
40°	9229	9086	9050
45°	8871	8754	8715
50°	8503	8431	8375
55°	8105	8105	7978
60°	7612	7757	7482
65°	6966	7313	6792
70°	6140	6730	5980
75°	5244	6024	5101
80°	4065	5069	4118
85°	2625	3896	3472



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	106.2	1.5
10°-20°	299.9	4.3
20°-30°	444.9	6.4
30°-40°	520.6	7.5
40°-50°	518.2	7.5
50°-60°	447.5	6.5
60°-70°	322.1	4.6
70°-80°	168.9	2.4
80°-90°	43.2	0.6
90°-100°	292.4	4.2
100°-110°	807.2	11.7
110°-120°	832.5	12.0
120°-130°	669.0	9.7
130°-140°	525.7	7.6
140°-150°	403.2	5.8
150°-160°	289.8	4.2
160°-170°	177.2	2.6
170°-180°	59.8	0.9
0°-30°	851.0	12.3
0°-40°	1371.6	19.8
0°-60°	2337.3	33.7
0°-90°	2871.6	41.4
90°-120°	1932.1	27.9
90°-150°	3530.0	51.0
90°-180°	4057.0	58.6
0°-180°	6928.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1128	1128	1128	1128	1128	
5°	1131	1118	1122	1119	1117	107
15°	1076	1063	1064	1062	1061	303
25°	984	968	966	960	963	452
35°	846	834	834	826	829	529
45°	680	674	671	669	668	525
55°	504	503	504	497	496	450
65°	319	329	335	322	311	316
75°	147	161	169	158	143	158
85°	25	33	37	35	33	33
90°	2	4	8	9	10	4
95°	43	158	530	218	142	46
105°	144	222	888	1356	1277	153
115°	258	312	715	1416	1610	253
125°	354	402	648	1097	1288	315
135°	426	472	630	889	1002	329
145°	494	528	622	756	814	309
155°	556	575	617	679	700	256
165°	602	610	620	644	649	170
175°	624	625	621	630	628	59
180°	624	624	624	624	624	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1128.2	1128.2	1128.2	1128.2	1128.2
2.5°	1134.5	1125.2	1128.2	1125.6	1120.2
5°	1131.1	1118.5	1122.2	1119.2	1117.2
7.5°	1119.6	1107.9	1110.7	1107.4	1106.3
10°	1109.3	1097.6	1100.3	1096.3	1094.4
12.5°	1097.3	1084.9	1087.6	1083.6	1082.4
15°	1076.5	1062.9	1064.5	1062.5	1060.6
17.5°	1052.2	1038.4	1038.7	1035.5	1035.1
20°	1034.7	1020.1	1018.8	1014.9	1016.8
22.5°	1015.6	1000.3	998.9	993.4	996.2
25°	984.0	967.5	966.1	960.2	963.2
27.5°	947.4	931.1	931.1	922.9	926.0
30°	920.4	904.9	906.5	896.6	900.5
32.5°	891.8	877.8	878.7	868.8	872.7
35°	845.9	834.2	833.9	826.1	829.0
37.5°	798.9	788.6	787.0	782.5	783.2
40°	766.3	757.6	754.4	751.4	751.4
42.5°	732.2	724.2	721.0	718.8	718.0
45°	679.9	674.0	670.9	668.9	667.9
47.5°	628.2	622.7	620.0	618.6	617.6
50°	592.4	588.5	587.4	584.4	583.5
52.5°	556.6	554.3	553.2	549.4	548.5
55°	503.9	503.0	503.9	497.0	496.0
57.5°	449.1	450.6	453.8	444.4	442.1
60°	412.5	416.4	420.4	409.4	405.5
62.5°	375.1	381.3	387.1	374.4	369.0
65°	319.1	328.8	335.0	321.8	311.1
67.5°	265.0	277.0	284.5	270.3	258.2
70°	227.6	241.2	249.5	235.3	221.7
72.5°	195.0	210.2	216.9	203.5	189.8
75°	147.1	160.7	169.0	157.7	143.1
77.5°	104.4	117.2	124.0	114.2	102.2
80°	76.5	90.1	95.4	87.2	77.5
82.5°	54.3	65.5	69.2	64.3	57.6
85°	24.8	32.6	36.8	34.7	32.8
87.5°	6.8	12.6	16.7	16.9	17.9
90°	2.0	4.0	8.0	9.0	10.0
92.5°	18.0	74.6	133.5	48.7	38.0
95°	43.0	158.2	530.5	218.0	141.9
97.5°	71.1	177.2	785.8	605.0	438.1
100°	91.9	188.6	880.1	886.3	720.3
102.5°	111.9	201.6	898.5	1095.1	937.6
105°	143.9	222.0	888.1	1355.8	1276.7
107.5°	177.8	247.4	838.5	1481.5	1510.4
110°	201.8	264.3	800.2	1508.6	1602.3

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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	223.4	283.5	764.2	1487.2	1625.5
115°	257.7	311.5	715.3	1416.0	1610.3
117.5°	287.7	341.2	683.1	1315.7	1536.8
120°	307.7	360.4	670.3	1247.8	1470.5
122.5°	326.9	377.3	659.9	1184.4	1395.4
125°	353.6	402.5	648.3	1097.2	1287.7
127.5°	376.4	425.2	641.5	1023.5	1187.8
130°	391.6	440.4	638.3	978.4	1127.8
132.5°	406.0	452.5	635.1	940.5	1075.9
135°	425.6	471.5	630.3	888.7	1002.0
137.5°	447.5	489.3	628.0	845.1	941.8
140°	459.5	500.5	626.4	816.1	901.1
142.5°	473.1	511.0	624.8	790.3	865.1
145°	493.5	527.7	622.4	756.5	814.2
147.5°	513.1	543.0	620.2	728.1	772.8
150°	527.5	551.9	619.4	711.1	747.2
152.5°	538.6	561.5	618.6	696.6	726.4
155°	556.4	575.0	617.4	678.8	700.3
157.5°	572.8	587.1	617.6	665.8	680.5
160°	582.4	595.1	618.4	658.6	669.3
162.5°	590.4	601.5	619.2	652.1	660.5
165°	602.4	610.2	620.4	644.4	649.3
167.5°	611.6	616.3	621.4	639.8	641.3
170°	616.4	620.3	621.4	637.3	637.3
172.5°	620.4	622.7	621.4	634.1	633.3
175°	624.4	625.3	621.4	630.3	628.4
177.5°	626.0	625.2	621.2	626.7	625.2
180°	624.4	624.4	624.4	624.4	624.4

(END OF REPORT)