

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: P564934

Luminaire Tested: **SQ4-PW1-100U-075D-835-1D-UNV-STD-W-4**

Issue Date: 7/30/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P564934  
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-835-1D-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: 3500K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

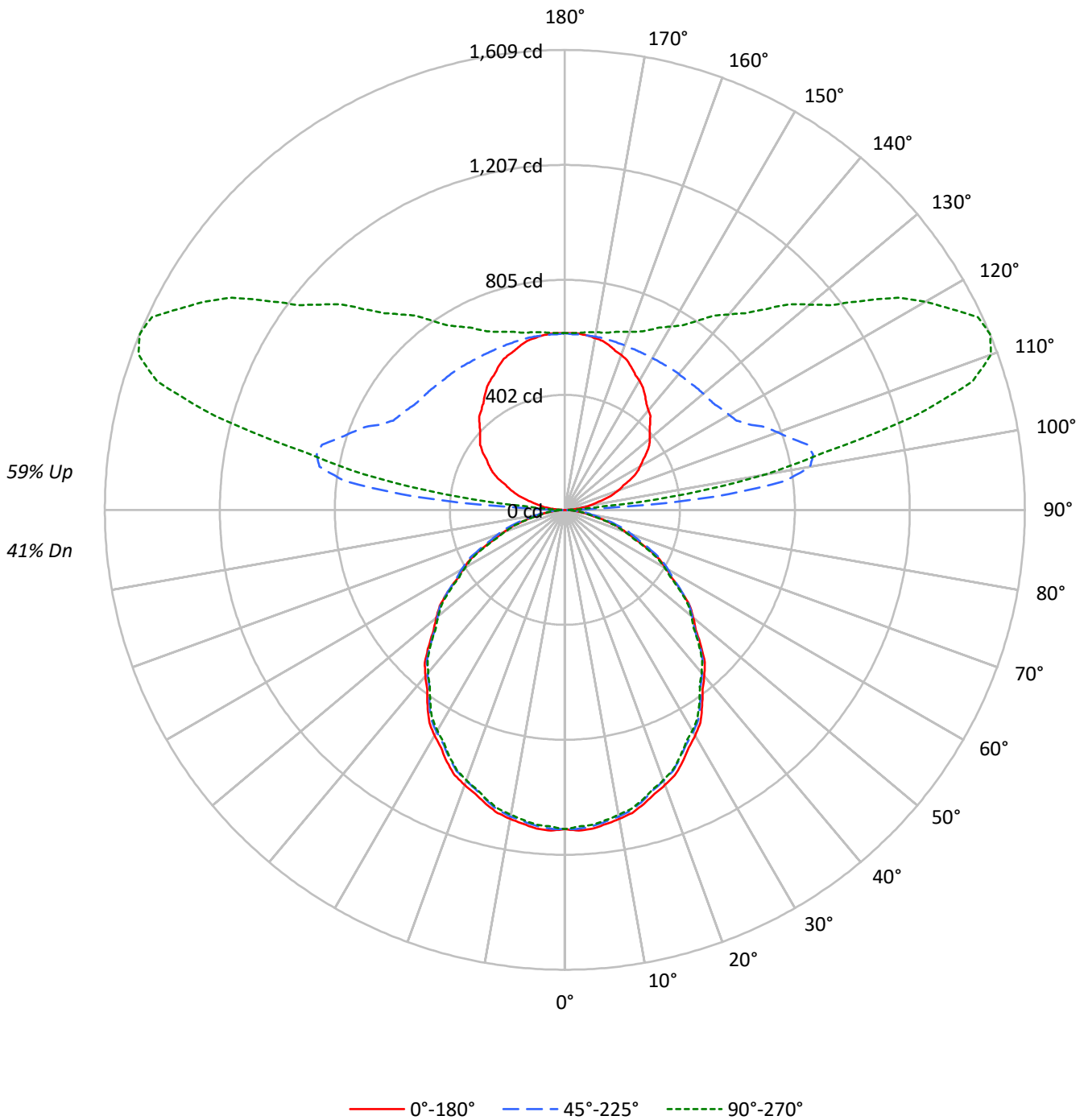
Lumens per Lamp: N/A  
Luminaire Lumens: 6859.3 lumens  
Efficiency: N/A  
Efficacy: 139.7 lumens/watt  
Spacing Criteria (0/90/45): 1.22 / 1.19 / 1.31  
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')  
CIE Type: General Diffuse

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°	10305	10305	10305
5°	10372	10289	10244
10°	10289	10206	10151
15°	10179	10067	10029
20°	10058	9904	9884
25°	9917	9737	9708
30°	9707	9562	9499
35°	9432	9299	9244
40°	9138	8996	8961
45°	8782	8666	8629
50°	8418	8348	8291
55°	8025	8025	7898
60°	7536	7682	7409
65°	6896	7239	6724
70°	6080	6663	5918
75°	5190	5964	5051
80°	4027	5021	4081
85°	2604	3853	3440



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	105.2	1.5
10°-20°	296.9	4.3
20°-30°	440.5	6.4
30°-40°	515.4	7.5
40°-50°	513.1	7.5
50°-60°	443.1	6.5
60°-70°	318.9	4.6
70°-80°	167.2	2.4
80°-90°	42.7	0.6
90°-100°	289.5	4.2
100°-110°	799.1	11.7
110°-120°	824.2	12.0
120°-130°	662.3	9.7
130°-140°	520.5	7.6
140°-150°	399.2	5.8
150°-160°	286.9	4.2
160°-170°	175.5	2.6
170°-180°	59.2	0.9
0°-30°	842.6	12.3
0°-40°	1357.9	19.8
0°-60°	2314.1	33.7
0°-90°	2843.0	41.4
90°-120°	1912.8	27.9
90°-150°	3494.8	50.9
90°-180°	4016.0	58.5
0°-180°	6859.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1117	1117	1117	1117	1117	
5°	1120	1107	1111	1108	1106	106
15°	1066	1052	1054	1052	1050	300
25°	974	958	956	951	954	448
35°	837	826	826	818	821	524
45°	673	667	664	662	661	519
55°	499	498	499	492	491	445
65°	316	326	332	319	308	313
75°	146	159	167	156	142	156
85°	25	32	36	34	32	32
90°	2	4	8	9	10	4
95°	42	157	525	216	140	45
105°	142	220	879	1342	1264	152
115°	255	308	708	1402	1594	251
125°	350	398	642	1086	1275	312
135°	421	467	624	880	992	326
145°	489	522	616	749	806	306
155°	551	569	611	672	693	254
165°	596	604	614	638	643	168
175°	618	619	615	624	622	59
180°	618	618	618	618	618	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1116.9	1116.9	1116.9	1116.9	1116.9
2.5°	1123.2	1114.0	1116.9	1114.4	1109.0
5°	1119.9	1107.4	1111.0	1108.0	1106.1
7.5°	1108.4	1096.9	1099.6	1096.4	1095.3
10°	1098.2	1086.7	1089.4	1085.4	1083.5
12.5°	1086.4	1074.1	1076.8	1072.8	1071.6
15°	1065.7	1052.3	1053.9	1051.9	1050.0
17.5°	1041.7	1028.1	1028.3	1025.2	1024.8
20°	1024.4	1010.0	1008.7	1004.8	1006.7
22.5°	1005.5	990.3	989.0	983.5	986.2
25°	974.2	957.9	956.5	950.7	953.6
27.5°	938.0	921.8	921.9	913.7	916.8
30°	911.2	895.8	897.5	887.7	891.6
32.5°	882.9	869.0	869.9	860.2	864.0
35°	837.4	825.9	825.6	817.8	820.7
37.5°	791.0	780.8	779.2	774.7	775.4
40°	758.7	750.1	746.9	744.0	744.0
42.5°	724.9	717.0	713.8	711.7	710.9
45°	673.1	667.3	664.2	662.3	661.3
47.5°	621.9	616.5	613.9	612.5	611.5
50°	586.5	582.7	581.6	578.6	577.6
52.5°	551.1	548.8	547.7	544.0	543.0
55°	498.9	498.0	498.9	492.0	491.0
57.5°	444.6	446.1	449.3	440.0	437.7
60°	408.4	412.2	416.3	405.3	401.5
62.5°	371.4	377.5	383.2	370.7	365.3
65°	315.9	325.5	331.6	318.6	308.0
67.5°	262.4	274.3	281.6	267.6	255.7
70°	225.4	238.8	247.0	232.9	219.4
72.5°	193.1	208.1	214.7	201.4	188.0
75°	145.6	159.1	167.3	156.1	141.7
77.5°	103.3	116.0	122.8	113.1	101.2
80°	75.8	89.2	94.5	86.4	76.8
82.5°	53.7	64.9	68.5	63.6	57.1
85°	24.6	32.3	36.4	34.4	32.5
87.5°	6.7	12.5	16.5	16.8	17.7
90°	2.0	3.9	7.9	8.9	9.9
92.5°	17.8	73.9	132.1	48.2	37.6
95°	42.5	156.6	525.2	215.9	140.4
97.5°	70.4	175.4	778.0	599.0	433.8
100°	91.0	186.7	871.3	877.5	713.1
102.5°	110.8	199.5	889.5	1084.2	928.3
105°	142.4	219.8	879.2	1342.3	1264.0
107.5°	176.0	244.9	830.2	1466.8	1495.4
110°	199.8	261.7	792.2	1493.5	1586.4



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	221.1	280.7	756.6	1472.4	1609.3
115°	255.2	308.4	708.1	1401.9	1594.3
117.5°	284.8	337.8	676.3	1302.6	1521.5
120°	304.6	356.8	663.6	1235.3	1455.8
122.5°	323.6	373.5	653.3	1172.6	1381.5
125°	350.1	398.5	641.9	1086.3	1274.8
127.5°	372.7	421.0	635.1	1013.3	1175.9
130°	387.7	436.0	632.0	968.6	1116.6
132.5°	401.9	448.0	628.8	931.1	1065.2
135°	421.3	466.8	624.1	879.8	992.0
137.5°	443.1	484.5	621.7	836.7	932.4
140°	454.9	495.6	620.1	808.0	892.1
142.5°	468.4	505.9	618.5	782.4	856.5
145°	488.6	522.4	616.2	749.0	806.0
147.5°	508.0	537.5	614.0	720.8	765.1
150°	522.2	546.4	613.2	704.0	739.8
152.5°	533.3	555.9	612.4	689.6	719.2
155°	550.9	569.3	611.2	672.0	693.3
157.5°	567.1	581.2	611.4	659.2	673.7
160°	576.6	589.2	612.2	652.0	662.6
162.5°	584.5	595.5	613.0	645.6	653.9
165°	596.4	604.1	614.2	638.0	642.9
167.5°	605.5	610.1	615.2	633.4	634.9
170°	610.2	614.1	615.2	631.0	631.0
172.5°	614.2	616.5	615.2	627.8	627.0
175°	618.1	619.1	615.2	624.0	622.1
177.5°	619.7	618.9	615.0	620.5	618.9
180°	618.1	618.1	618.1	618.1	618.1

(END OF REPORT)