

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: P564640

Luminaire Tested: **SQ4-PW1-050U-050D-940-1D-UNV-STD-W-8**

Issue Date: 7/30/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P564640  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-21, 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-PW1-050U-050D-940-1D-UNV-STD-W-8  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE WAVES CONTINUOUS LENS.  
DOWNLIGHT 500 LUMENS PER FOOT  
UPLIGHT 500 LUMENS PER FOOT  
Light Source: 4000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

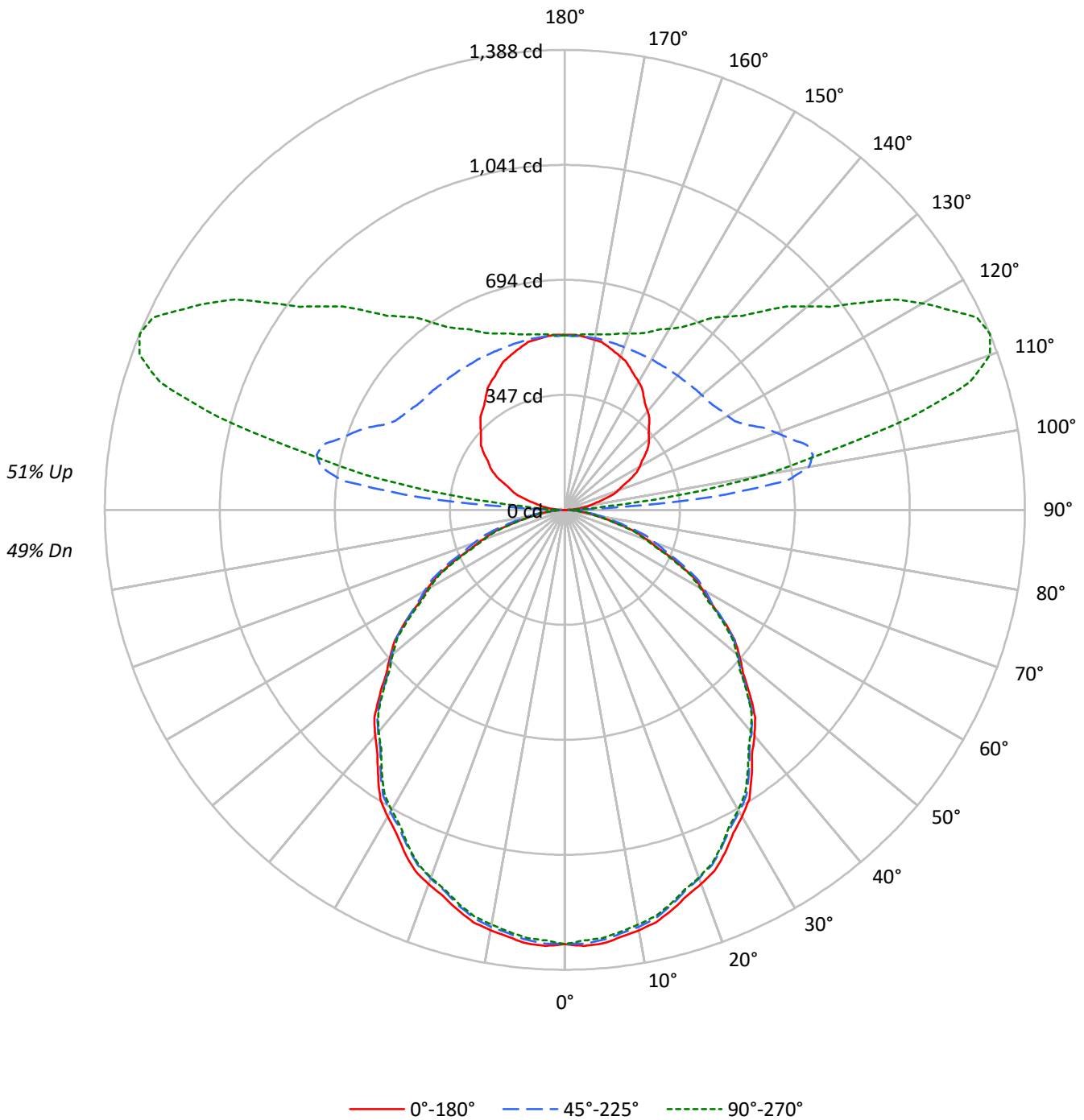
Lumens per Lamp: N/A  
Luminaire Lumens: 6779.5 lumens  
Efficiency: N/A  
Efficacy: 115.1 lumens/watt  
Spacing Criteria (0/90/45): 1.22 / 1.19 / 1.31  
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')  
CIE Type: General Diffuse

Input Watts (W): 58.9  
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	107	107	107	107	99	99	99	99	83	83	83	69	69	69	55	55	55	49
1	98	93	90	86	90	86	83	80	73	70	68	60	59	57	49	48	47	42
2	89	82	76	70	82	75	70	66	64	60	57	53	50	48	43	41	40	35
3	81	72	65	59	75	66	60	55	56	52	48	47	44	41	38	36	34	30
4	74	64	56	50	68	59	52	47	50	45	41	42	38	35	34	32	29	26
5	68	57	49	43	63	53	45	40	45	39	35	38	33	30	31	28	25	22
6	63	51	43	37	58	47	40	35	40	35	31	34	30	26	28	25	22	19
7	58	46	38	32	53	43	36	31	37	31	27	31	27	23	26	22	20	17
8	54	42	34	29	50	39	32	27	33	28	24	28	24	21	24	20	18	15
9	50	38	31	26	46	35	29	24	31	25	21	26	22	19	22	19	16	14
10	47	35	28	23	43	33	26	22	28	23	19	24	20	17	20	17	15	13

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

	0°	45°	90°
0°	6044	6044	6044
5°	6083	6035	6008
10°	6035	5986	5954
15°	5971	5904	5882
20°	5899	5809	5797
25°	5817	5711	5694
30°	5694	5608	5571
35°	5532	5454	5421
40°	5360	5276	5255
45°	5151	5083	5061
50°	4938	4896	4863
55°	4707	4707	4633
60°	4420	4505	4346
65°	4045	4246	3944
70°	3566	3907	3472
75°	3044	3497	2962
80°	2362	2943	2391
85°	1530	2260	2017



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	123.4	1.8
10°-20°	348.3	5.1
20°-30°	516.7	7.6
30°-40°	604.6	8.9
40°-50°	601.9	8.9
50°-60°	519.7	7.7
60°-70°	374.1	5.5
70°-80°	196.2	2.9
80°-90°	50.7	0.7
90°-100°	253.2	3.7
100°-110°	687.8	10.1
110°-120°	707.2	10.4
120°-130°	565.4	8.3
130°-140°	444.3	6.6
140°-150°	340.7	5.0
150°-160°	245.0	3.6
160°-170°	149.8	2.2
170°-180°	50.5	0.7
0°-30°	988.4	14.6
0°-40°	1592.9	23.5
0°-60°	2714.6	40.0
0°-90°	3335.5	49.2
90°-120°	1648.3	24.3
90°-150°	2998.6	44.2
90°-180°	3444.0	50.8
0°-180°	6779.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1310	1310	1310	1310	1310	
5°	1314	1299	1303	1300	1298	124
15°	1250	1234	1236	1234	1232	352
25°	1143	1124	1122	1115	1119	525
35°	982	969	968	959	963	614
45°	790	783	779	777	776	609
55°	585	584	585	577	576	522
65°	371	382	389	374	361	367
75°	171	187	196	183	166	183
85°	29	38	43	40	38	38
90°	2	7	12	15	15	4
95°	37	138	441	192	129	40
105°	122	190	756	1152	1084	130
115°	217	264	606	1205	1372	214
125°	298	340	548	923	1089	266
135°	360	399	532	752	848	278
145°	416	445	526	639	687	261
155°	470	486	522	574	590	217
165°	509	515	524	546	548	144
175°	528	529	526	532	531	50
180°	528	528	528	528	528	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1310.2	1310.2	1310.2	1310.2	1310.2
2.5°	1317.6	1306.8	1310.2	1307.3	1301.0
5°	1313.7	1299.0	1303.3	1299.8	1297.5
7.5°	1300.3	1286.7	1289.9	1286.2	1284.8
10°	1288.3	1274.7	1277.9	1273.2	1271.0
12.5°	1274.4	1260.0	1263.1	1258.5	1257.1
15°	1250.2	1234.4	1236.3	1234.0	1231.7
17.5°	1222.0	1206.0	1206.3	1202.6	1202.2
20°	1201.7	1184.8	1183.2	1178.7	1180.9
22.5°	1179.5	1161.7	1160.1	1153.7	1156.9
25°	1142.8	1123.6	1122.0	1115.2	1118.6
27.5°	1100.3	1081.4	1081.4	1071.8	1075.4
30°	1068.9	1050.9	1052.8	1041.3	1045.9
32.5°	1035.7	1019.4	1020.5	1009.0	1013.5
35°	982.4	968.8	968.5	959.4	962.7
37.5°	927.9	915.9	914.0	908.7	909.6
40°	890.0	879.9	876.2	872.7	872.7
42.5°	850.3	841.1	837.4	834.8	833.9
45°	789.6	782.8	779.2	776.9	775.7
47.5°	729.6	723.2	720.1	718.5	717.3
50°	688.0	683.5	682.2	678.7	677.6
52.5°	646.4	643.7	642.5	638.1	637.0
55°	585.3	584.1	585.3	577.2	576.0
57.5°	521.5	523.4	527.1	516.2	513.5
60°	479.1	483.6	488.3	475.5	471.0
62.5°	435.7	442.9	449.5	434.8	428.5
65°	370.6	381.8	389.0	373.7	361.3
67.5°	307.8	321.8	330.4	313.9	299.9
70°	264.4	280.2	289.7	273.2	257.4
72.5°	226.5	244.1	251.9	236.3	220.5
75°	170.8	186.6	196.2	183.2	166.2
77.5°	121.2	136.1	144.1	132.7	118.7
80°	88.9	104.7	110.8	101.3	90.0
82.5°	63.0	76.1	80.3	74.6	67.0
85°	28.9	37.9	42.7	40.4	38.1
87.5°	7.7	15.0	19.9	20.6	21.5
90°	1.7	6.7	11.9	15.3	15.3
92.5°	15.3	69.3	120.4	51.7	43.8
95°	37.3	138.5	441.0	191.9	128.9
97.5°	61.7	152.9	676.0	525.9	369.4
100°	78.0	162.6	747.9	758.2	612.3
102.5°	94.3	172.2	766.9	937.7	809.0
105°	122.1	190.1	756.4	1151.7	1083.8
107.5°	150.9	211.0	712.7	1262.3	1281.2
110°	171.3	226.0	680.1	1284.0	1365.3



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	188.9	241.0	647.5	1266.0	1388.4
115°	217.1	263.5	605.5	1204.6	1372.1
117.5°	243.5	288.0	578.7	1117.6	1306.3
120°	261.2	304.3	566.5	1059.2	1246.6
122.5°	276.1	319.2	558.3	1000.7	1181.4
125°	298.5	340.0	547.8	923.0	1088.8
127.5°	318.5	359.6	542.0	864.1	1006.4
130°	330.7	370.5	539.3	827.2	954.9
132.5°	342.9	382.7	536.6	795.6	908.7
135°	359.6	399.4	532.5	751.8	848.0
137.5°	377.5	413.7	530.5	713.1	794.1
140°	388.4	423.2	529.2	688.5	761.5
142.5°	399.2	431.4	527.8	669.3	730.3
145°	415.5	445.4	525.8	638.8	686.9
147.5°	433.8	459.4	524.1	614.8	652.6
150°	446.1	467.6	524.1	601.1	630.9
152.5°	455.6	474.5	522.7	588.7	613.3
155°	469.8	486.4	522.4	573.6	590.2
157.5°	483.7	496.6	522.4	563.4	576.0
160°	491.8	503.5	522.4	556.5	566.5
162.5°	500.0	508.9	523.7	551.0	558.3
165°	508.8	515.4	524.1	546.2	547.8
167.5°	518.0	521.3	525.8	540.4	541.7
170°	520.7	524.0	525.8	537.6	537.6
172.5°	523.4	525.4	525.8	534.9	534.9
175°	527.5	529.1	525.8	532.5	530.9
177.5°	528.8	528.8	524.7	530.1	527.5
180°	527.5	527.5	527.5	527.5	527.5

(END OF REPORT)