

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: P564688

Luminaire Tested: **SQ4-PW1-050U-100D-940-1D-UNV-STD-W-8**

Issue Date: 7/30/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P564688  
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-100D-940-1D-UNV-STD-W-8  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE WAVES CONTINUOUS LENS.  
DOWNLIGHT 1000 LUMENS PER FOOT  
UPLIGHT 500 LUMENS PER FOOT  
Light Source: 4000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

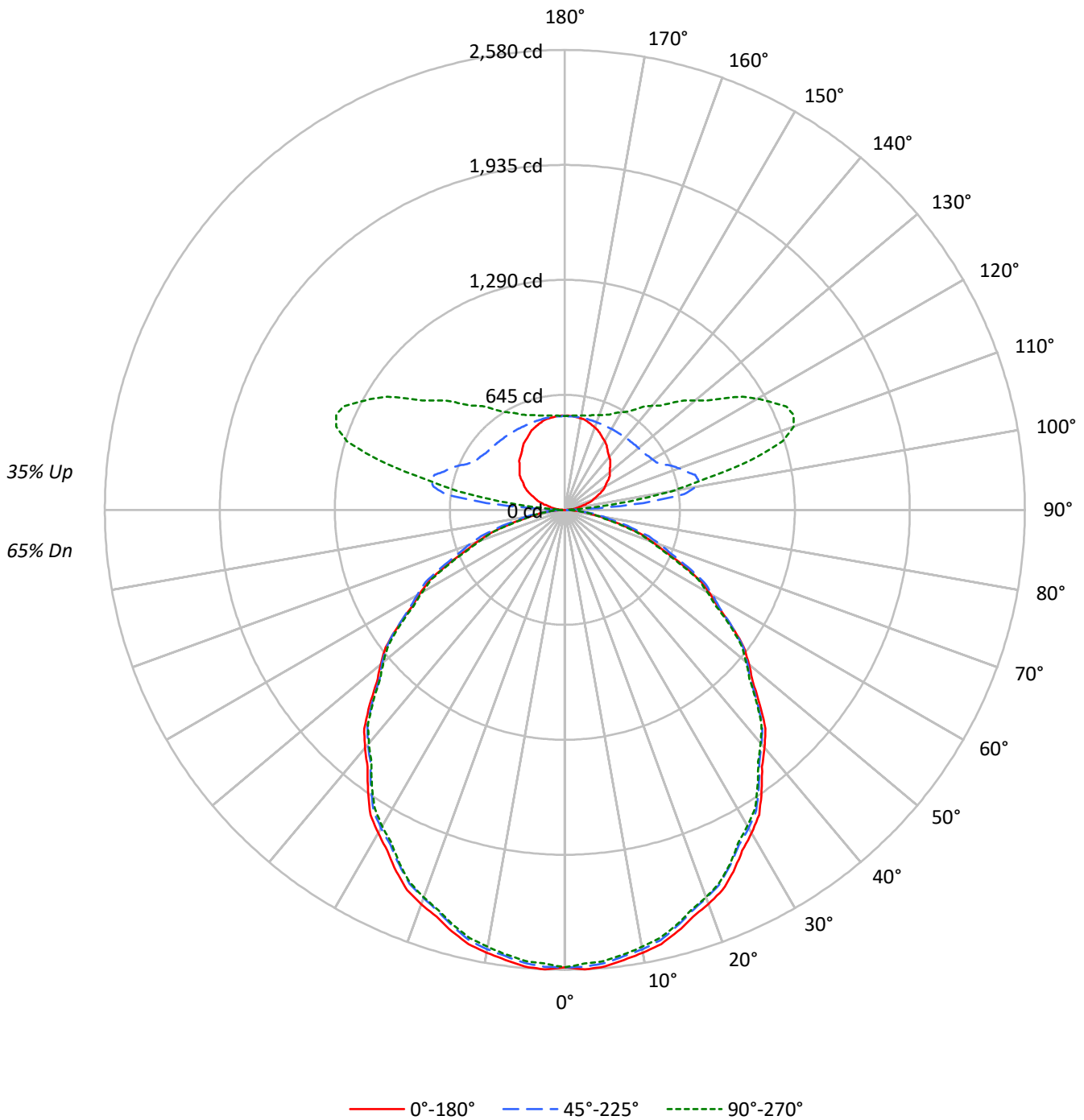
Lumens per Lamp: N/A  
Luminaire Lumens: 9974.1 lumens  
Efficiency: N/A  
Efficacy: 104.6 lumens/watt  
Spacing Criteria (0/90/45): 1.22 / 1.19 / 1.31  
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')  
CIE Type: Semi-Direct

Input Watts (W): 95.4  
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	111	111	111	111	104	104	104	104	92	92	92	81	81	81	70	70	70	65
1	101	97	93	90	95	91	88	85	81	78	76	71	69	68	62	61	60	55
2	92	85	79	73	87	80	75	70	71	67	63	63	59	57	55	53	50	47
3	84	75	67	61	79	71	64	59	63	58	53	56	51	48	49	46	43	40
4	77	66	58	52	72	63	55	50	56	50	45	50	45	41	44	40	37	34
5	71	59	51	45	67	56	48	43	50	44	39	45	40	36	39	36	32	30
6	66	53	45	39	61	50	43	37	45	39	34	40	35	31	36	32	29	26
7	61	48	40	34	57	46	38	33	41	35	30	37	32	28	33	29	25	23
8	56	44	36	30	53	42	34	29	38	31	27	34	29	25	30	26	23	21
9	53	40	32	27	49	38	31	26	34	29	24	31	26	22	28	24	21	19
10	49	37	29	24	46	35	28	24	32	26	22	29	24	20	26	22	19	17

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

	0°	45°	90°
0°	11837	11837	11837
5°	11913	11819	11767
10°	11818	11723	11659
15°	11693	11563	11520
20°	11553	11376	11353
25°	11392	11185	11150
30°	11151	10982	10910
35°	10834	10681	10618
40°	10496	10333	10292
45°	10088	9955	9911
50°	9670	9589	9523
55°	9219	9219	9073
60°	8656	8823	8510
65°	7921	8315	7724
70°	6983	7653	6799
75°	5964	6850	5802
80°	4625	5765	4684
85°	2991	4425	3949



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	241.6	2.4
10°-20°	682.1	6.8
20°-30°	1011.9	10.1
30°-40°	1184.0	11.9
40°-50°	1178.7	11.8
50°-60°	1017.8	10.2
60°-70°	732.7	7.3
70°-80°	384.2	3.9
80°-90°	97.3	1.0
90°-100°	253.2	2.5
100°-110°	687.8	6.9
110°-120°	707.2	7.1
120°-130°	565.4	5.7
130°-140°	444.3	4.5
140°-150°	340.7	3.4
150°-160°	245.0	2.5
160°-170°	149.8	1.5
170°-180°	50.5	0.5
0°-30°	1935.6	19.4
0°-40°	3119.6	31.3
0°-60°	5316.1	53.3
0°-90°	6530.2	65.5
90°-120°	1648.3	16.5
90°-150°	2998.6	30.1
90°-180°	3444.0	34.5
0°-180°	9974.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2566	2566	2566	2566	2566	
5°	2573	2544	2552	2545	2541	244
15°	2448	2417	2421	2416	2412	690
25°	2238	2200	2197	2184	2191	1029
35°	1924	1897	1897	1879	1885	1203
45°	1546	1533	1526	1521	1519	1193
55°	1146	1144	1146	1130	1128	1023
65°	726	748	762	732	708	719
75°	335	366	384	359	326	359
85°	56	74	84	79	75	75
90°	2	7	12	15	15	5
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°	2565.9	2565.9	2565.9	2565.9	2565.9
2.5°	2580.3	2559.1	2565.9	2560.1	2547.8
5°	2572.6	2543.9	2552.3	2545.4	2541.0
7.5°	2546.4	2519.9	2526.1	2518.8	2516.1
10°	2522.9	2496.4	2502.6	2493.4	2489.0
12.5°	2495.8	2467.5	2473.6	2464.5	2461.9
15°	2448.3	2417.4	2421.2	2416.5	2412.1
17.5°	2393.1	2361.8	2362.4	2355.1	2354.3
20°	2353.4	2320.2	2317.2	2308.2	2312.7
22.5°	2309.9	2275.0	2272.0	2259.4	2265.6
25°	2238.1	2200.5	2197.4	2184.0	2190.6
27.5°	2154.9	2117.7	2117.8	2099.0	2106.0
30°	2093.4	2058.0	2061.7	2039.3	2048.2
32.5°	2028.3	1996.4	1998.4	1976.0	1984.9
35°	1923.8	1897.3	1896.7	1878.8	1885.4
37.5°	1817.1	1793.7	1790.0	1779.6	1781.4
40°	1743.0	1723.1	1715.8	1709.1	1709.1
42.5°	1665.2	1647.1	1639.9	1634.9	1633.1
45°	1546.3	1533.0	1525.9	1521.4	1519.2
47.5°	1428.7	1416.4	1410.2	1407.0	1404.8
50°	1347.4	1338.5	1336.1	1329.2	1327.0
52.5°	1266.0	1260.7	1258.3	1249.6	1247.4
55°	1146.2	1143.9	1146.2	1130.3	1128.1
57.5°	1021.4	1024.9	1032.2	1010.8	1005.5
60°	938.2	947.0	956.3	931.2	922.4
62.5°	853.2	867.3	880.3	851.5	839.2
65°	725.7	747.8	761.8	731.9	707.6
67.5°	602.7	630.1	647.0	614.7	587.3
70°	517.7	548.6	567.4	535.1	504.1
72.5°	443.5	478.0	493.3	462.7	431.8
75°	334.6	365.5	384.3	358.7	325.5
77.5°	237.4	266.5	282.1	259.8	232.4
80°	174.1	205.0	217.0	198.4	176.3
82.5°	123.4	149.1	157.3	146.1	131.1
85°	56.5	74.2	83.6	79.0	74.6
87.5°	14.8	28.2	36.7	37.5	39.2
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)