

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: P564473

Luminaire Tested: **SQ4-PR1-150U-100D-830-1D-UNV-STD-W-12**

Issue Date: 7/30/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P564473  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-25, G2-2106-289-4)  
Test Lab: INNOVATION CENTER  
Issue Date: 7/30/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: SQ4-PR1-150U-100D-830-1D-UNV-STD-W-12  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE RIPPLE CONTINUOUS LENS.  
DOWNLIGHT 1000 LUMENS PER FOOT  
UPLIGHT 1500 LUMENS PER FOOT  
Light Source: 3000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

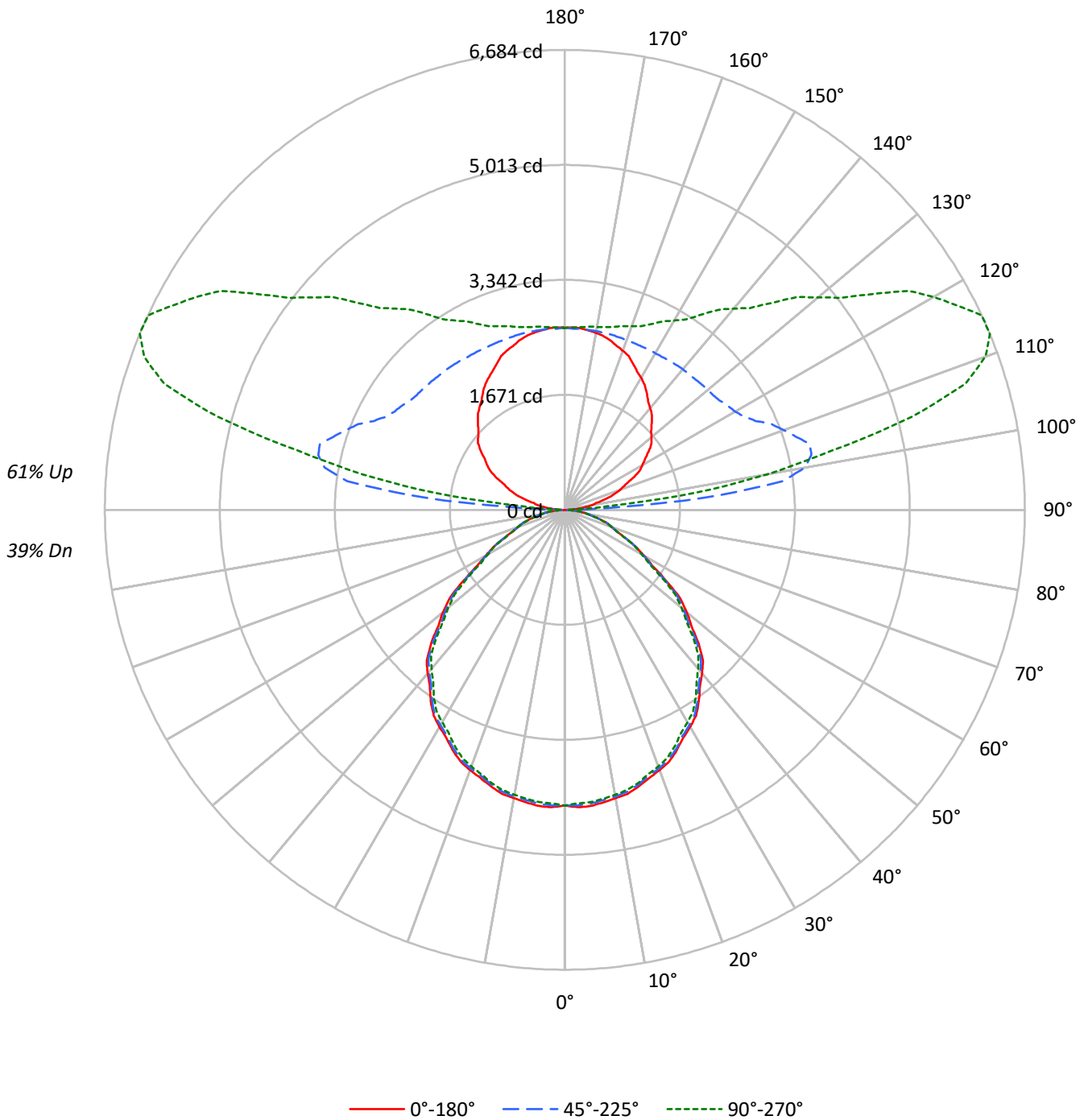
Lumens per Lamp: N/A  
Luminaire Lumens: 27809.4 lumens  
Efficiency: N/A  
Efficacy: 124.3 lumens/watt  
Spacing Criteria (0/90/45): 1.26 / 1.24 / 1.35  
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')  
CIE Type: Semi-Indirect

Input Watts (W): 223.7  
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									
RC	80					70					50					30					10				
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0				
RCR																									
0	104	104	104	104	95	95	95	95	77	77	77	61	61	61	46	46	46	39							
1	95	91	88	84	87	83	80	77	68	66	64	54	52	51	41	40	39	33							
2	87	80	74	69	79	73	68	64	60	56	53	47	45	43	36	35	33	28							
3	80	70	63	58	72	64	58	53	53	48	45	42	39	36	32	30	28	24							
4	73	62	55	49	66	57	50	45	47	42	38	38	34	31	29	27	25	21							
5	67	56	48	42	61	51	44	39	42	37	33	34	30	27	26	24	22	18							
6	62	50	42	36	56	46	39	34	38	33	29	31	27	24	24	21	19	16							
7	57	45	37	32	52	41	34	30	34	29	25	28	24	21	22	19	17	14							
8	53	41	33	28	48	37	31	26	31	26	22	25	22	19	20	17	15	13							
9	49	37	30	25	45	34	28	23	29	24	20	23	20	17	18	16	14	11							
10	46	34	27	22	42	31	25	21	26	21	18	21	18	15	17	14	12	10							

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

	0°	45°	90°
0°	13220	13220	13220
5°	13339	13236	13168
10°	13297	13204	13135
15°	13238	13156	13085
20°	13172	13087	12990
25°	13079	12991	12840
30°	12938	12846	12662
35°	12747	12636	12455
40°	12456	12323	12099
45°	11948	11739	11498
50°	11054	10788	10576
55°	9648	9430	9231
60°	8130	8062	7903
65°	7032	7059	7005
70°	6459	6492	6492
75°	6204	6204	6248
80°	5836	5901	5836
85°	4704	5226	5226



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	406.5	1.5
10°-20°	1163.0	4.2
20°-30°	1754.2	6.3
30°-40°	2090.1	7.5
40°-50°	2060.7	7.4
50°-60°	1574.9	5.7
60°-70°	974.6	3.5
70°-80°	553.6	2.0
80°-90°	173.9	0.6
90°-100°	1229.6	4.4
100°-110°	3324.5	12.0
110°-120°	3495.2	12.6
120°-130°	2839.1	10.2
130°-140°	2227.0	8.0
140°-150°	1709.2	6.1
150°-160°	1229.3	4.4
160°-170°	750.9	2.7
170°-180°	253.2	0.9
0°-30°	3323.7	12.0
0°-40°	5413.9	19.5
0°-60°	9049.4	32.5
0°-90°	10751.5	38.7
90°-120°	8049.2	28.9
90°-150°	14824.5	53.3
90°-180°	17058.0	61.3
0°-180°	27809.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	4299	4299	4299	4299	4299	
5°	4321	4274	4288	4272	4265	410
15°	4158	4114	4132	4117	4110	1173
25°	3854	3807	3828	3788	3784	1774
35°	3395	3355	3366	3321	3317	2119
45°	2747	2711	2699	2651	2644	2105
55°	1799	1770	1759	1729	1722	1612
65°	966	959	970	963	963	979
75°	522	522	522	526	526	551
85°	133	140	148	148	148	155
90°	6	17	37	40	37	18
95°	191	670	2045	1058	629	200
105°	618	955	3688	5440	5217	651
115°	1088	1330	3059	5921	6684	1074
125°	1490	1707	2757	4652	5465	1328
135°	1786	1997	2683	3756	4252	1380
145°	2076	2232	2646	3215	3460	1299
155°	2344	2436	2623	2884	2979	1081
165°	2552	2577	2634	2737	2751	719
175°	2649	2646	2637	2671	2666	251
180°	2646	2646	2646	2646	2646	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	4298.6	4298.6	4298.6	4298.6	4298.6
2.5°	4325.2	4287.6	4298.6	4289.2	4269.0
5°	4320.8	4273.7	4287.5	4272.5	4265.3
7.5°	4287.5	4241.1	4254.9	4240.0	4235.6
10°	4257.9	4214.4	4228.2	4213.3	4206.0
12.5°	4225.3	4178.9	4195.7	4177.7	4170.5
15°	4157.9	4114.4	4132.0	4117.0	4109.8
17.5°	4083.8	4037.5	4055.0	4037.7	4028.3
20°	4024.6	3981.2	3998.7	3972.7	3969.1
22.5°	3959.4	3916.0	3933.5	3898.7	3898.0
25°	3854.3	3807.2	3828.4	3787.6	3783.9
27.5°	3729.1	3685.7	3703.2	3661.7	3657.3
30°	3643.2	3599.8	3617.3	3572.7	3565.5
32.5°	3545.5	3505.0	3519.6	3475.1	3470.7
35°	3395.2	3355.4	3365.6	3321.0	3317.4
37.5°	3224.1	3187.9	3193.8	3144.8	3141.2
40°	3102.7	3066.5	3069.4	3017.4	3013.8
42.5°	2969.4	2933.2	2930.1	2878.2	2874.6
45°	2747.2	2711.0	2699.1	2650.8	2643.6
47.5°	2494.0	2457.8	2435.5	2396.1	2391.1
50°	2310.3	2274.1	2254.8	2221.2	2210.4
52.5°	2111.9	2075.7	2059.3	2028.7	2017.9
55°	1799.4	1770.4	1758.7	1728.9	1721.7
57.5°	1502.5	1482.9	1479.5	1450.6	1447.7
60°	1321.8	1310.9	1310.7	1284.8	1284.8
62.5°	1167.8	1159.8	1165.5	1148.4	1145.5
65°	966.3	959.1	970.1	962.6	962.6
67.5°	807.1	807.1	813.8	810.8	810.8
70°	718.3	718.3	722.0	722.0	722.0
72.5°	638.3	635.4	645.0	644.9	642.0
75°	522.1	522.1	522.1	525.8	525.8
77.5°	406.5	407.3	410.2	409.4	406.5
80°	329.5	333.1	333.2	329.5	329.5
82.5°	252.5	256.1	256.2	255.4	252.5
85°	133.3	140.5	148.1	148.1	148.1
87.5°	39.6	53.5	66.6	67.1	63.7
90°	5.7	16.8	37.0	39.8	37.0
92.5°	80.9	294.7	581.5	252.5	182.8
95°	190.8	669.8	2044.8	1058.2	629.4
97.5°	306.4	768.1	3187.4	2637.8	1937.2
100°	393.0	807.9	3542.8	3694.8	2987.5
102.5°	472.8	863.2	3668.1	4496.2	3967.1
105°	618.0	954.9	3688.0	5440.1	5217.4
107.5°	752.4	1059.8	3526.9	6029.0	6103.1
110°	857.2	1135.7	3383.3	6187.1	6501.8

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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	950.6	1211.3	3251.2	6155.5	6684.1
115°	1087.9	1330.2	3058.7	5921.1	6684.1
117.5°	1222.3	1449.6	2931.6	5562.8	6427.7
120°	1304.3	1527.1	2856.5	5305.8	6188.5
122.5°	1381.8	1600.1	2810.9	5030.3	5919.7
125°	1489.5	1706.7	2756.8	4652.0	5465.1
127.5°	1588.6	1801.9	2724.9	4343.4	5058.5
130°	1643.2	1863.2	2711.2	4152.7	4798.7
132.5°	1700.2	1918.0	2697.5	3980.7	4575.5
135°	1785.6	1997.3	2682.7	3756.3	4251.9
137.5°	1871.6	2071.6	2670.2	3574.2	3978.0
140°	1930.9	2117.5	2665.6	3457.0	3816.2
142.5°	1987.8	2163.3	2656.5	3351.2	3665.8
145°	2076.1	2232.1	2645.7	3215.2	3460.2
147.5°	2156.4	2294.6	2633.2	3092.0	3280.2
150°	2215.7	2338.2	2628.6	3025.1	3175.4
152.5°	2270.4	2377.3	2626.3	2962.9	3086.6
155°	2343.8	2435.7	2622.9	2884.2	2978.9
157.5°	2420.2	2484.2	2623.5	2829.4	2891.8
160°	2463.4	2516.4	2625.8	2794.8	2839.4
162.5°	2497.6	2541.6	2628.1	2767.2	2800.6
165°	2551.7	2576.8	2634.3	2737.2	2751.1
167.5°	2588.8	2606.0	2634.9	2711.4	2718.0
170°	2611.5	2619.9	2637.2	2699.8	2699.8
172.5°	2629.8	2631.4	2637.2	2686.1	2683.9
175°	2648.6	2645.8	2637.2	2671.2	2665.6
177.5°	2654.8	2648.1	2636.6	2659.2	2652.5
180°	2645.7	2645.7	2645.7	2645.7	2645.7

(END OF REPORT)