

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: P520431

Luminaire Tested: **SQ4-F-150U-100D-940-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P520431  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-25, G3-1910-536-19)  
Test Lab: INNOVATION CENTER  
Issue Date: 4/29/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: SQ4-F-150U-100D-940-1D-UNV-STD-W-12  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE  
DOWNLIGHT 1000 LUMENS PER FOOT  
UPLIGHT 1500 LUMENS PER FOOT  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

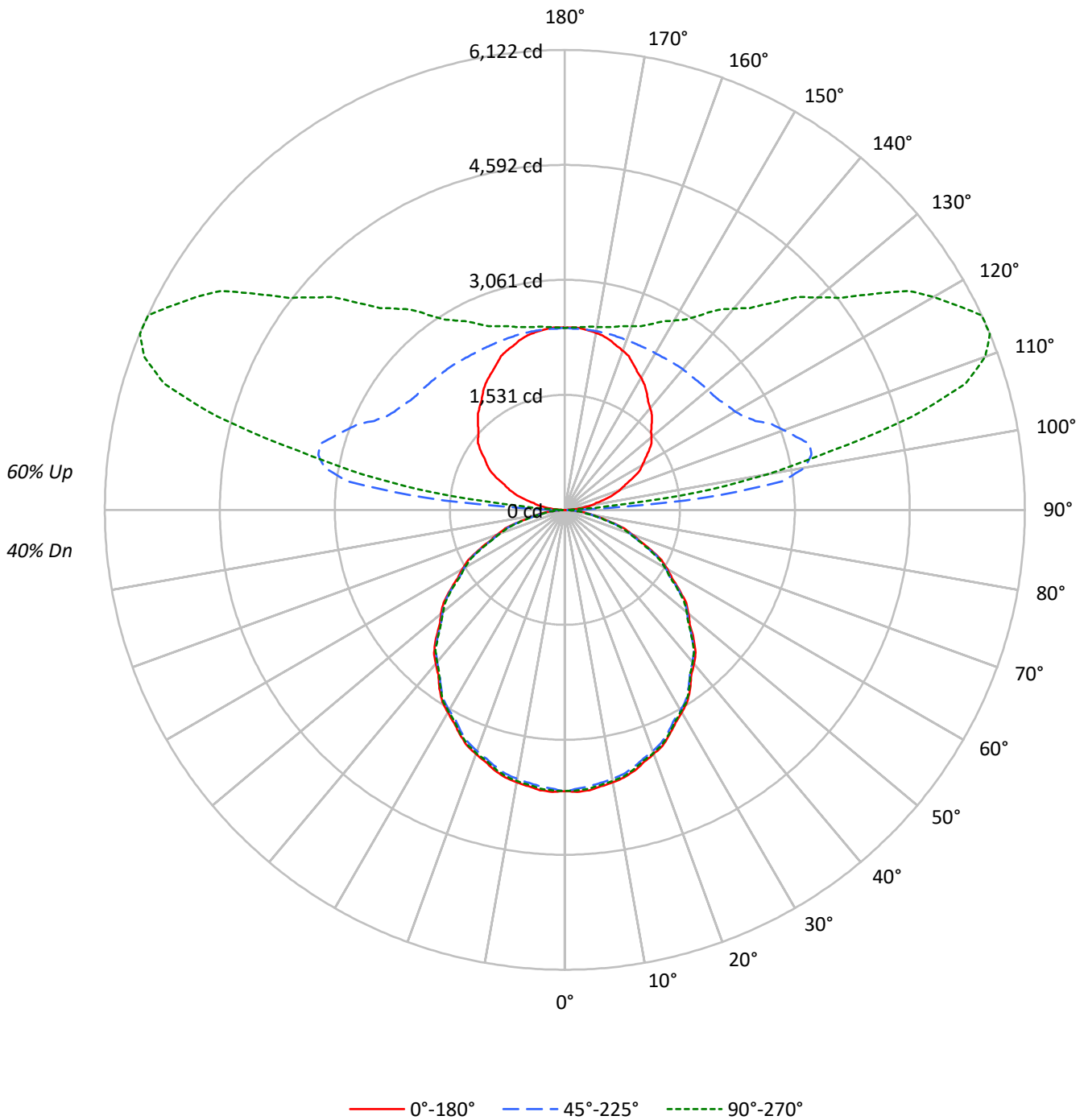
Lumens per Lamp: N/A  
Luminaire Lumens: 25839.2 lumens  
Efficiency: N/A  
Efficacy: 113.2 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35  
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')  
CIE Type: Semi-Indirect

Input Watts (W): 228.3  
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	95	95	95	95	78	78	78	61	61	61	47	47	47	40
1	95	91	87	84	87	83	80	77	68	66	64	54	52	51	41	40	39	33
2	87	80	73	68	79	73	67	63	59	56	52	47	45	42	36	34	33	28
3	79	70	63	57	72	64	57	52	52	48	44	42	39	36	32	30	28	23
4	72	62	54	48	65	56	50	44	46	41	37	37	33	31	28	26	24	20
5	66	55	47	41	60	50	43	38	41	36	32	33	29	26	26	23	21	17
6	61	49	41	35	55	45	38	33	37	32	28	30	26	23	23	20	18	15
7	56	44	36	31	51	41	34	29	34	28	24	27	23	20	21	18	16	13
8	52	40	32	27	47	37	30	25	31	25	22	25	21	18	19	17	14	12
9	48	36	29	24	44	34	27	22	28	23	19	23	19	16	18	15	13	11
10	45	33	26	21	41	31	24	20	26	21	17	21	17	15	16	14	12	10

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

	0°	45°	90°
0°	11514	11514	11514
5°	11566	11408	11495
10°	11507	11363	11451
15°	11437	11282	11372
20°	11320	11185	11278
25°	11196	11065	11153
30°	11060	10941	10996
35°	10921	10786	10843
40°	10739	10616	10626
45°	10550	10405	10371
50°	10278	10155	10131
55°	9976	9865	9796
60°	9673	9499	9467
65°	9200	8994	8919
70°	8549	8341	8180
75°	7633	7388	7236
80°	6280	6052	5781
85°	3716	4079	4171



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	353.4	1.4
10°-20°	1006.3	3.9
20°-30°	1511.2	5.8
30°-40°	1803.4	7.0
40°-50°	1848.5	7.2
50°-60°	1646.1	6.4
60°-70°	1227.1	4.7
70°-80°	664.4	2.6
80°-90°	156.2	0.6
90°-100°	1126.1	4.4
100°-110°	3044.8	11.8
110°-120°	3201.1	12.4
120°-130°	2600.2	10.1
130°-140°	2039.6	7.9
140°-150°	1565.4	6.1
150°-160°	1125.8	4.4
160°-170°	687.8	2.7
170°-180°	231.9	0.9
0°-30°	2870.8	11.1
0°-40°	4674.2	18.1
0°-60°	8168.8	31.6
0°-90°	10216.5	39.5
90°-120°	7372.0	28.5
90°-150°	13577.3	52.5
90°-180°	15623.0	60.5
0°-180°	25839.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	3744	3744	3744	3744	3744	
5°	3746	3739	3695	3728	3723	355
15°	3592	3580	3544	3572	3572	1012
25°	3299	3292	3261	3279	3287	1520
35°	2909	2896	2873	2878	2888	1816
45°	2426	2413	2392	2380	2385	1866
55°	1860	1863	1840	1822	1827	1665
65°	1264	1259	1236	1223	1226	1250
75°	642	635	622	609	609	684
85°	105	115	116	118	118	147
90°	5	15	34	36	34	14
95°	175	614	1873	969	576	183
105°	566	875	3378	4982	4778	596
115°	996	1218	2801	5423	6122	984
125°	1364	1563	2525	4261	5005	1216
135°	1635	1829	2457	3440	3894	1264
145°	1901	2044	2423	2945	3169	1190
155°	2147	2231	2402	2642	2728	990
165°	2337	2360	2413	2507	2520	658
175°	2426	2423	2415	2446	2441	230
180°	2423	2423	2423	2423	2423	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	3743.9	3743.9	3743.9	3743.9	3743.9
2.5°	3758.4	3750.4	3717.3	3743.9	3739.9
5°	3746.5	3739.0	3695.2	3728.5	3723.4
7.5°	3711.6	3704.1	3665.3	3696.1	3691.5
10°	3684.9	3677.3	3638.6	3669.4	3666.8
12.5°	3649.9	3642.4	3603.6	3634.4	3632.0
15°	3592.3	3579.8	3543.6	3571.8	3571.8
17.5°	3516.3	3506.7	3473.1	3496.8	3497.3
20°	3458.8	3451.2	3417.6	3443.4	3445.9
22.5°	3401.2	3393.7	3355.9	3379.7	3384.3
25°	3299.4	3291.9	3260.9	3279.0	3286.6
27.5°	3194.6	3183.5	3153.0	3169.0	3174.5
30°	3114.5	3109.4	3081.0	3088.9	3096.4
32.5°	3030.1	3025.1	3000.8	3004.8	3018.3
35°	2908.9	2896.3	2872.9	2878.2	2888.2
37.5°	2765.5	2759.4	2736.7	2733.8	2743.4
40°	2675.0	2664.9	2644.2	2639.2	2646.7
42.5°	2576.3	2566.2	2541.4	2536.4	2546.0
45°	2425.7	2413.1	2392.3	2379.6	2384.6
47.5°	2257.2	2257.2	2235.6	2220.8	2228.4
50°	2148.2	2148.2	2122.5	2109.9	2117.4
52.5°	2035.1	2037.1	2009.5	2002.7	2000.2
55°	1860.5	1862.9	1839.9	1822.0	1827.0
57.5°	1691.8	1686.3	1659.4	1647.7	1650.2
60°	1572.6	1565.1	1544.4	1526.7	1539.2
62.5°	1451.4	1447.8	1427.2	1407.1	1405.6
65°	1264.3	1259.2	1236.0	1223.2	1225.7
67.5°	1078.2	1072.2	1051.0	1032.6	1039.2
70°	950.8	950.8	927.6	917.2	909.7
72.5°	833.6	823.6	806.3	791.9	786.3
75°	642.4	634.9	621.8	609.0	609.0
77.5°	467.7	461.1	452.8	444.0	441.5
80°	354.6	352.1	341.7	338.9	326.4
82.5°	249.8	249.3	243.0	236.4	235.9
85°	105.3	115.4	115.6	118.2	118.2
87.5°	19.5	33.6	35.5	31.8	31.3
90°	5.2	15.4	33.9	36.4	33.9
92.5°	74.0	269.9	532.6	231.2	167.5
95°	174.7	613.5	1872.7	969.2	576.4
97.5°	280.7	703.5	2919.3	2415.9	1774.2
100°	359.9	739.9	3244.7	3383.9	2736.1
102.5°	433.0	790.5	3359.5	4117.9	3633.4
105°	566.0	874.6	3377.8	4982.4	4778.4
107.5°	689.1	970.7	3230.1	5521.8	5589.7
110°	785.1	1040.1	3098.6	5666.6	5954.7



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	870.7	1109.4	2977.6	5637.6	6121.7
115°	996.3	1218.2	2801.4	5422.9	6121.7
117.5°	1119.5	1327.6	2685.0	5094.8	5886.9
120°	1194.6	1398.6	2616.2	4859.4	5667.8
122.5°	1265.5	1465.5	2574.4	4607.0	5421.7
125°	1364.1	1563.1	2524.8	4260.7	5005.4
127.5°	1455.0	1650.3	2495.7	3978.0	4632.9
130°	1505.0	1706.5	2483.1	3803.3	4395.1
132.5°	1557.2	1756.6	2470.6	3645.8	4190.5
135°	1635.4	1829.3	2457.0	3440.3	3894.2
137.5°	1714.2	1897.3	2445.6	3273.5	3643.3
140°	1768.4	1939.3	2441.4	3166.1	3495.1
142.5°	1820.6	1981.3	2433.1	3069.3	3357.4
145°	1901.4	2044.3	2423.1	2944.6	3169.1
147.5°	1975.1	2101.5	2411.7	2831.9	3004.3
150°	2029.3	2141.4	2407.4	2770.6	2908.3
152.5°	2079.4	2177.3	2405.4	2713.6	2826.9
155°	2146.7	2230.8	2402.3	2641.6	2728.3
157.5°	2216.6	2275.2	2402.8	2591.3	2648.5
160°	2256.2	2304.6	2404.9	2559.7	2600.5
162.5°	2287.5	2327.8	2406.9	2534.4	2565.1
165°	2337.0	2360.0	2412.7	2506.9	2519.6
167.5°	2370.9	2386.8	2413.3	2483.3	2489.4
170°	2391.8	2399.5	2415.3	2472.7	2472.7
172.5°	2408.5	2410.0	2415.3	2460.1	2458.0
175°	2425.7	2423.2	2415.3	2446.5	2441.4
177.5°	2431.5	2425.3	2414.8	2435.5	2429.4
180°	2423.1	2423.1	2423.1	2423.1	2423.1

(END OF REPORT)