

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: P519942

Luminaire Tested: **SQ4-F-050U-100D-840-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P519942  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-21, 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-050U-100D-840-1D-UNV-STD-W-8  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE  
DOWNLIGHT 1000 LUMENS PER FOOT  
UPLIGHT 500 LUMENS PER FOOT  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

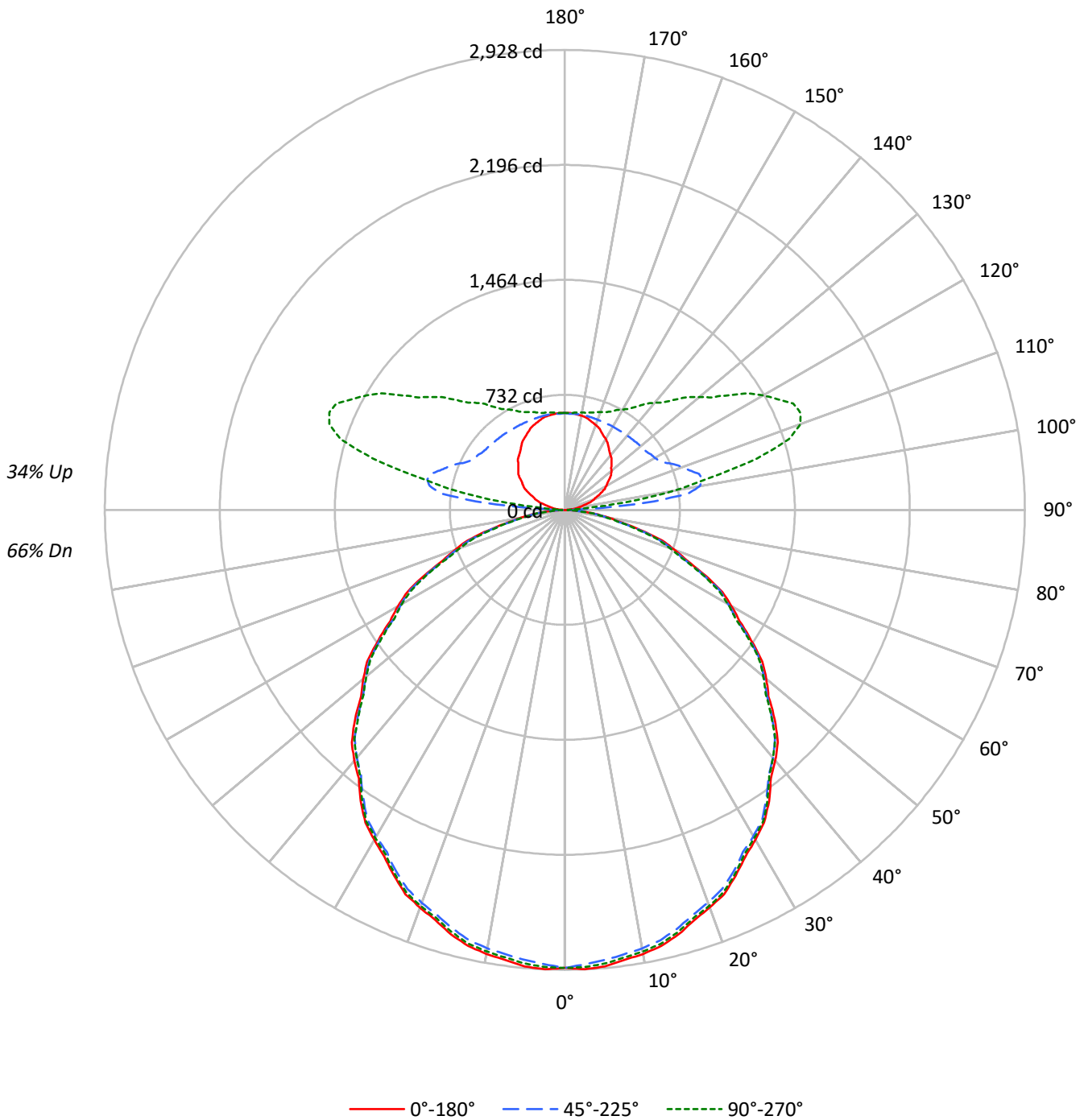
Lumens per Lamp: N/A  
Luminaire Lumens: 11980.4 lumens  
Efficiency: N/A  
Efficacy: 129.4 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35  
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')  
CIE Type: Semi-Direct

Input Watts (W): 92.6  
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	105	105	105	105	92	92	92	81	81	81	71	71	71	66
1	101	97	93	89	95	91	88	85	81	79	76	72	70	68	63	61	60	56
2	92	85	78	73	87	80	74	69	71	67	63	63	59	57	55	53	51	47
3	84	74	67	61	79	70	63	58	63	57	53	55	51	48	49	46	43	39
4	77	66	58	51	72	62	55	49	56	50	45	49	45	41	44	40	37	34
5	71	59	50	44	66	56	48	42	50	44	39	44	39	35	39	35	32	29
6	65	53	44	38	61	50	42	37	45	39	34	40	35	31	36	31	28	26
7	60	48	39	34	57	45	38	32	41	34	30	36	31	27	32	28	25	23
8	56	43	35	30	53	41	34	29	37	31	27	33	28	24	30	26	22	20
9	52	40	32	27	49	38	31	26	34	28	24	31	26	22	27	23	20	18
10	49	36	29	24	46	35	28	23	31	26	21	28	23	20	25	21	18	16

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

	0°	45°	90°
0°	13453	13453	13453
5°	13514	13328	13430
10°	13445	13276	13379
15°	13364	13182	13287
20°	13226	13069	13177
25°	13081	12929	13030
30°	12922	12784	12848
35°	12760	12602	12670
40°	12548	12403	12415
45°	12327	12157	12118
50°	12009	11865	11837
55°	11655	11526	11446
60°	11302	11099	11062
65°	10750	10509	10422
70°	9988	9746	9556
75°	8919	8634	8456
80°	7337	7072	6753
85°	4340	4769	4870



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	275.2	2.3
10°-20°	783.8	6.5
20°-30°	1177.1	9.8
30°-40°	1404.7	11.7
40°-50°	1439.9	12.0
50°-60°	1282.2	10.7
60°-70°	955.8	8.0
70°-80°	517.5	4.3
80°-90°	120.2	1.0
90°-100°	295.9	2.5
100°-110°	803.7	6.7
110°-120°	826.3	6.9
120°-130°	660.7	5.5
130°-140°	519.1	4.3
140°-150°	398.0	3.3
150°-160°	286.2	2.4
160°-170°	175.1	1.5
170°-180°	59.0	0.5
0°-30°	2236.2	18.7
0°-40°	3640.9	30.4
0°-60°	6363.0	53.1
0°-90°	7956.4	66.4
90°-120°	1925.9	16.1
90°-150°	3503.7	29.2
90°-180°	4024.0	33.6
0°-180°	11980.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2916	2916	2916	2916	2916	
5°	2918	2912	2878	2904	2900	277
15°	2798	2788	2760	2782	2782	788
25°	2570	2564	2540	2554	2560	1184
35°	2266	2256	2238	2242	2250	1414
45°	1890	1880	1863	1854	1858	1454
55°	1449	1451	1433	1419	1423	1297
65°	985	981	963	953	955	974
75°	500	494	484	474	474	533
85°	82	90	90	92	92	115
90°	2	8	14	18	18	5
95°	44	162	515	224	151	46
105°	143	222	884	1346	1266	152
115°	254	308	707	1408	1603	250
125°	349	397	640	1078	1272	311
135°	420	467	622	878	991	325
145°	486	520	614	746	803	305
155°	549	568	610	670	690	253
165°	594	602	612	638	640	168
175°	616	618	614	622	620	59
180°	616	616	616	616	616	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2916.3	2916.3	2916.3	2916.3	2916.3
2.5°	2927.5	2921.2	2895.5	2916.3	2913.1
5°	2918.3	2912.4	2878.2	2904.2	2900.3
7.5°	2891.1	2885.2	2855.1	2879.0	2875.5
10°	2870.3	2864.4	2834.2	2858.2	2856.2
12.5°	2843.1	2837.2	2807.0	2831.0	2829.0
15°	2798.2	2788.5	2760.2	2782.2	2782.2
17.5°	2738.9	2731.5	2705.3	2723.8	2724.2
20°	2694.1	2688.3	2662.1	2682.2	2684.1
22.5°	2649.3	2643.4	2614.1	2632.6	2636.1
25°	2570.0	2564.1	2540.0	2554.1	2560.0
27.5°	2488.4	2479.7	2456.0	2468.4	2472.8
30°	2425.9	2422.0	2399.9	2406.0	2412.0
32.5°	2360.2	2356.4	2337.4	2340.5	2351.0
35°	2265.8	2256.0	2237.8	2241.9	2249.8
37.5°	2154.1	2149.4	2131.7	2129.5	2136.9
40°	2083.7	2075.9	2059.6	2055.8	2061.6
42.5°	2006.8	1999.0	1979.6	1975.7	1983.1
45°	1889.5	1879.7	1863.4	1853.5	1857.5
47.5°	1758.2	1758.2	1741.4	1729.9	1735.8
50°	1673.3	1673.3	1653.3	1643.5	1649.3
52.5°	1585.2	1586.8	1565.2	1560.0	1558.1
55°	1449.2	1451.1	1433.1	1419.3	1423.1
57.5°	1317.9	1313.5	1292.6	1283.4	1285.4
60°	1225.0	1219.1	1203.0	1189.2	1199.0
62.5°	1130.5	1127.8	1111.7	1096.0	1094.9
65°	984.8	980.9	962.8	952.8	954.8
67.5°	839.8	835.2	818.6	804.3	809.4
70°	740.5	740.5	722.6	714.5	708.5
72.5°	649.3	641.5	628.1	616.8	612.5
75°	500.4	494.5	484.4	474.4	474.4
77.5°	364.3	359.2	352.6	345.8	343.9
80°	276.2	274.3	266.2	264.0	254.2
82.5°	194.6	194.2	189.3	184.1	183.7
85°	82.0	89.9	90.1	92.0	92.0
87.5°	14.8	25.4	25.3	22.8	22.8
90°	2.0	7.8	13.8	17.9	17.9
92.5°	17.9	81.0	140.7	60.4	51.1
95°	43.6	161.8	515.3	224.2	150.6
97.5°	72.1	178.7	789.8	614.5	431.6
100°	91.2	190.0	873.9	885.9	715.4
102.5°	110.2	201.3	896.1	1095.6	945.3
105°	142.7	222.2	883.8	1345.7	1266.3
107.5°	176.3	246.5	832.7	1474.9	1497.0
110°	200.2	264.1	794.6	1500.3	1595.2

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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	220.8	281.6	756.6	1479.2	1622.2
115°	253.7	307.9	707.4	1407.5	1603.1
117.5°	284.6	336.5	676.1	1305.8	1526.3
120°	305.2	355.5	661.9	1237.6	1456.5
122.5°	322.6	373.0	652.4	1169.2	1380.4
125°	348.7	397.2	640.1	1078.4	1272.2
127.5°	372.1	420.2	633.3	1009.6	1175.9
130°	386.4	432.9	630.2	966.5	1115.6
132.5°	400.7	447.2	626.9	929.6	1061.8
135°	420.1	466.6	622.2	878.4	990.8
137.5°	441.1	483.4	619.9	833.2	927.8
140°	453.7	494.5	618.3	804.5	889.7
142.5°	466.5	504.1	616.6	782.0	853.3
145°	485.5	520.4	614.3	746.4	802.6
147.5°	506.9	536.8	612.3	718.4	762.6
150°	521.2	546.4	612.3	702.3	737.1
152.5°	532.2	554.3	610.8	687.9	716.5
155°	548.9	568.3	610.4	670.2	689.6
157.5°	565.1	580.2	610.4	658.2	673.0
160°	574.6	588.3	610.4	650.2	661.9
162.5°	584.2	594.7	611.9	643.8	652.4
165°	594.5	602.2	612.3	638.1	640.1
167.5°	605.2	609.1	614.3	631.4	632.9
170°	608.4	612.2	614.3	628.2	628.2
172.5°	611.5	613.9	614.3	625.0	625.0
175°	616.2	618.2	614.3	622.2	620.3
177.5°	617.9	617.9	613.1	619.4	616.2
180°	616.2	616.2	616.2	616.2	616.2

(END OF REPORT)