

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: P520307

Luminaire Tested: **SQ4-F-125U-075D-935-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P520307  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-24, G3-1910-536-18)  
Test Lab: INNOVATION CENTER  
Issue Date: 4/29/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: SQ4-F-125U-075D-935-1D-UNV-STD-W-12  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE  
DOWNLIGHT 750 LUMENS PER FOOT  
UPLIGHT 1250 LUMENS PER FOOT  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

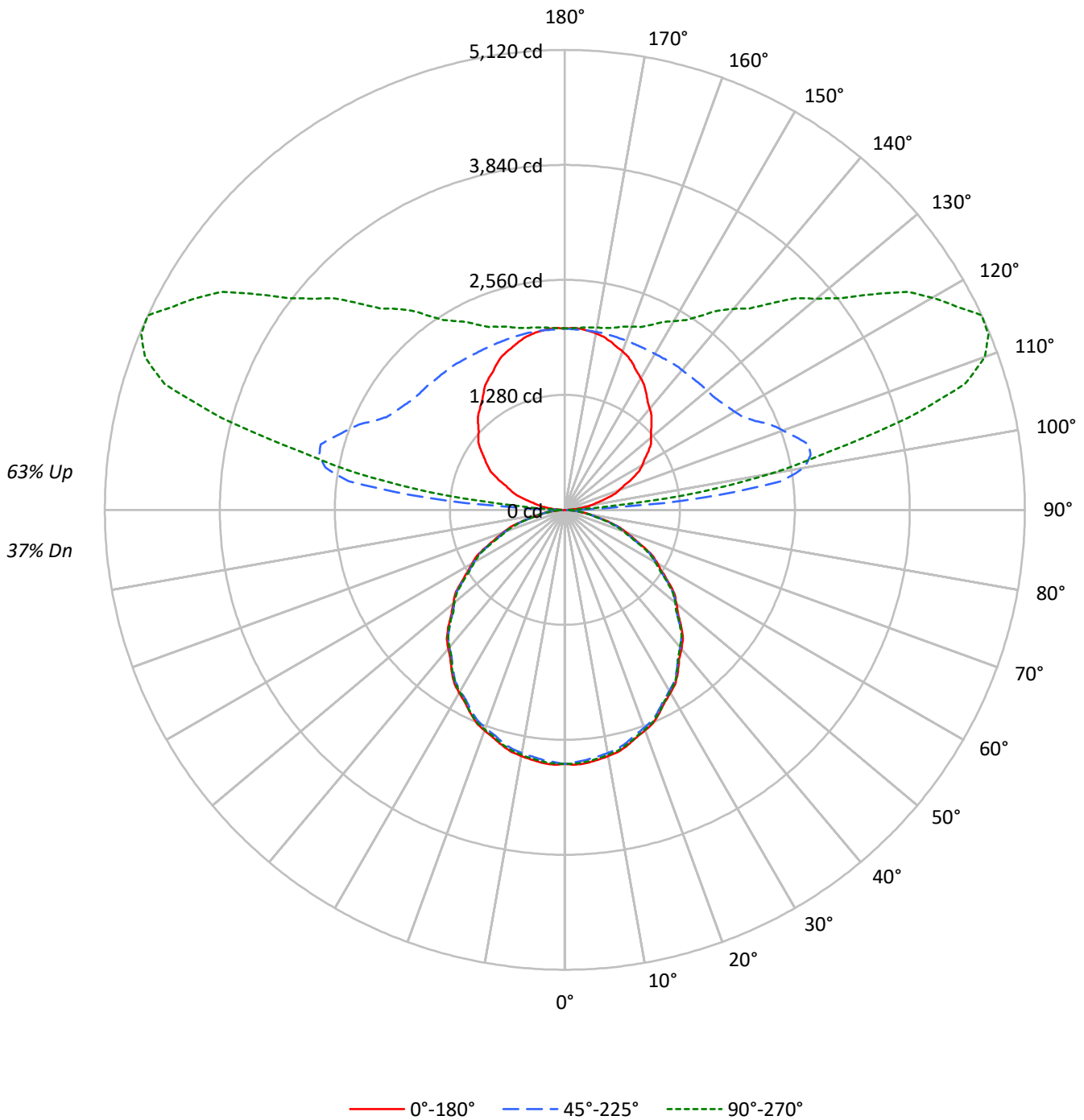
Lumens per Lamp: N/A  
Luminaire Lumens: 20760.2 lumens  
Efficiency: N/A  
Efficacy: 116.9 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35  
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')  
CIE Type: Semi-Indirect

Input Watts (W): 177.6  
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	104	104	104	104	94	94	94	94	76	76	76	60	60	60	44	44	44	37
1	95	91	87	83	86	82	79	76	67	64	62	52	51	50	39	38	37	31
2	86	79	73	68	78	72	67	62	58	55	52	46	43	41	34	33	31	26
3	79	69	62	56	71	63	57	52	51	47	43	41	37	35	30	28	27	22
4	72	61	54	48	65	56	49	44	46	41	37	36	33	30	27	25	23	19
5	66	54	47	41	59	50	43	38	41	35	32	32	29	26	24	22	20	16
6	61	49	41	35	55	45	38	32	37	31	27	29	25	22	22	19	17	14
7	56	44	36	31	51	40	33	28	33	28	24	26	23	20	20	17	15	13
8	52	40	32	27	47	36	30	25	30	25	21	24	20	17	18	16	14	11
9	48	36	29	24	44	33	27	22	27	22	19	22	18	16	17	14	12	10
10	45	33	26	21	41	30	24	20	25	20	17	20	17	14	16	13	11	9

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

	0°	45°	90°
0°	8702	8702	8702
5°	8735	8624	8687
10°	8700	8588	8651
15°	8633	8526	8600
20°	8555	8454	8521
25°	8461	8373	8434
30°	8353	8262	8308
35°	8243	8157	8195
40°	8105	8022	8012
45°	7966	7865	7887
50°	7744	7683	7683
55°	7564	7468	7399
60°	7321	7195	7131
65°	6926	6795	6701
70°	6505	6343	6182
75°	5852	5638	5517
80°	4679	4589	4543
85°	2805	3165	3257



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	267.1	1.3
10°-20°	760.3	3.7
20°-30°	1142.3	5.5
30°-40°	1363.0	6.6
40°-50°	1397.8	6.7
50°-60°	1245.5	6.0
60°-70°	928.7	4.5
70°-80°	503.6	2.4
80°-90°	120.4	0.6
90°-100°	944.3	4.5
100°-110°	2543.8	12.3
110°-120°	2669.6	12.9
120°-130°	2166.3	10.4
130°-140°	1699.0	8.2
140°-150°	1304.4	6.3
150°-160°	937.9	4.5
160°-170°	573.0	2.8
170°-180°	193.2	0.9
0°-30°	2169.6	10.5
0°-40°	3532.6	17.0
0°-60°	6175.9	29.7
0°-90°	7728.6	37.2
90°-120°	6157.8	29.7
90°-150°	11327.5	54.6
90°-180°	13032.0	62.8
0°-180°	20760.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2829	2829	2829	2829	2829	
5°	2829	2824	2794	2816	2814	268
15°	2711	2706	2678	2699	2701	765
25°	2493	2491	2468	2481	2486	1148
35°	2196	2191	2173	2173	2183	1372
45°	1832	1824	1808	1808	1814	1410
55°	1411	1408	1393	1380	1380	1260
65°	952	952	934	923	921	947
75°	492	482	474	467	464	517
85°	80	84	90	90	92	110
90°	5	15	31	33	33	12
95°	144	514	1548	792	548	150
105°	471	732	2813	4209	3950	495
115°	831	1017	2343	4527	5120	817
125°	1134	1302	2104	3555	4184	1013
135°	1366	1524	2044	2868	3248	1054
145°	1579	1702	2019	2452	2633	990
155°	1792	1858	2001	2200	2271	825
165°	1944	1967	2008	2088	2098	548
175°	2021	2019	2011	2039	2034	192
180°	2019	2019	2019	2019	2019	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2829.4	2829.4	2829.4	2829.4	2829.4
2.5°	2839.6	2833.6	2808.8	2829.3	2827.3
5°	2829.4	2824.4	2793.5	2816.5	2813.9
7.5°	2806.2	2800.7	2770.3	2793.5	2793.0
10°	2785.8	2778.2	2749.9	2772.9	2770.3
12.5°	2759.0	2751.5	2723.2	2746.2	2743.7
15°	2711.4	2706.4	2678.0	2698.6	2701.1
17.5°	2657.0	2647.4	2622.0	2642.1	2644.7
20°	2613.9	2606.4	2583.1	2601.1	2603.6
22.5°	2568.7	2561.2	2538.0	2556.0	2558.5
25°	2493.3	2490.8	2467.6	2480.6	2485.6
27.5°	2411.7	2404.8	2386.1	2396.0	2401.0
30°	2352.2	2347.2	2326.6	2334.4	2339.4
32.5°	2290.7	2287.6	2269.1	2272.9	2279.9
35°	2195.7	2190.7	2172.7	2172.9	2182.9
37.5°	2090.5	2085.0	2070.1	2067.6	2071.6
40°	2018.8	2011.2	1998.2	1995.7	1995.7
42.5°	1944.9	1939.4	1922.3	1917.8	1923.8
45°	1831.5	1824.0	1808.4	1808.5	1813.5
47.5°	1708.9	1705.9	1687.9	1679.7	1681.7
50°	1618.6	1623.6	1605.8	1595.8	1605.8
52.5°	1540.6	1537.6	1521.7	1511.4	1515.5
55°	1410.8	1408.3	1392.8	1380.0	1380.0
57.5°	1280.6	1274.0	1257.9	1248.4	1255.9
60°	1190.2	1187.8	1169.7	1151.9	1159.4
62.5°	1099.9	1095.5	1077.4	1065.6	1071.2
65°	951.7	951.7	933.7	923.3	920.9
67.5°	821.9	809.8	799.8	787.4	783.9
70°	723.4	713.3	705.4	694.9	687.5
72.5°	626.9	620.9	608.9	598.7	597.1
75°	492.5	482.5	474.5	466.8	464.3
77.5°	350.4	348.4	341.2	337.1	338.6
80°	264.2	264.2	259.1	259.0	256.5
82.5°	186.2	188.3	187.3	183.1	182.6
85°	79.5	84.5	89.7	89.8	92.3
87.5°	15.4	27.5	28.7	29.2	29.2
90°	5.1	15.2	30.9	33.4	33.4
92.5°	62.8	221.6	438.2	211.0	146.6
95°	144.0	513.6	1548.1	791.6	547.7
97.5°	229.9	588.0	2428.0	2028.4	1529.5
100°	295.7	617.6	2707.8	2833.2	2350.4
102.5°	359.5	659.2	2800.4	3435.8	3039.6
105°	470.6	732.0	2813.2	4208.8	3949.9
107.5°	575.6	808.8	2693.4	4606.1	4673.0
110°	645.4	866.7	2584.4	4729.4	4973.3



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	719.5	924.7	2479.5	4702.2	5103.0
115°	830.6	1016.7	2342.7	4526.6	5120.0
117.5°	932.0	1106.4	2236.7	4246.2	4907.0
120°	997.8	1166.2	2183.2	4045.0	4723.9
122.5°	1055.4	1221.9	2144.1	3839.3	4516.1
125°	1134.0	1302.5	2103.5	3555.3	4183.9
127.5°	1209.6	1375.6	2077.8	3304.8	3866.1
130°	1254.9	1420.9	2067.6	3161.3	3654.2
132.5°	1300.2	1464.1	2057.2	3034.9	3487.5
135°	1365.5	1523.9	2044.4	2868.2	3247.9
137.5°	1427.7	1579.6	2037.7	2726.8	3038.5
140°	1470.9	1616.7	2031.6	2639.7	2921.3
142.5°	1516.2	1652.0	2027.4	2558.5	2795.8
145°	1578.9	1702.1	2018.6	2452.2	2633.2
147.5°	1646.8	1753.9	2009.9	2362.9	2505.2
150°	1692.1	1785.1	2005.8	2306.7	2425.0
152.5°	1733.3	1814.2	2003.7	2261.1	2357.1
155°	1792.4	1857.7	2000.7	2200.3	2270.6
157.5°	1844.3	1895.1	2001.2	2157.6	2204.8
160°	1877.2	1920.0	2003.2	2132.6	2167.8
162.5°	1906.0	1940.8	2005.3	2111.8	2136.9
165°	1944.1	1966.7	2008.4	2088.3	2098.4
167.5°	1974.9	1988.0	2010.9	2070.2	2074.2
170°	1995.5	2000.6	2010.9	2059.8	2059.8
172.5°	2007.9	2008.9	2013.0	2049.5	2049.5
175°	2021.2	2018.7	2010.9	2039.1	2034.1
177.5°	2026.9	2022.9	2012.5	2028.9	2024.8
180°	2018.6	2018.6	2018.6	2018.6	2018.6

(END OF REPORT)