

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: P520331

Luminaire Tested: **SQ4-F-125U-100D-935-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P520331  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-24, 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-125U-100D-935-1D-UNV-STD-W-12  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE  
DOWNLIGHT 1000 LUMENS PER FOOT  
UPLIGHT 1250 LUMENS PER FOOT  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

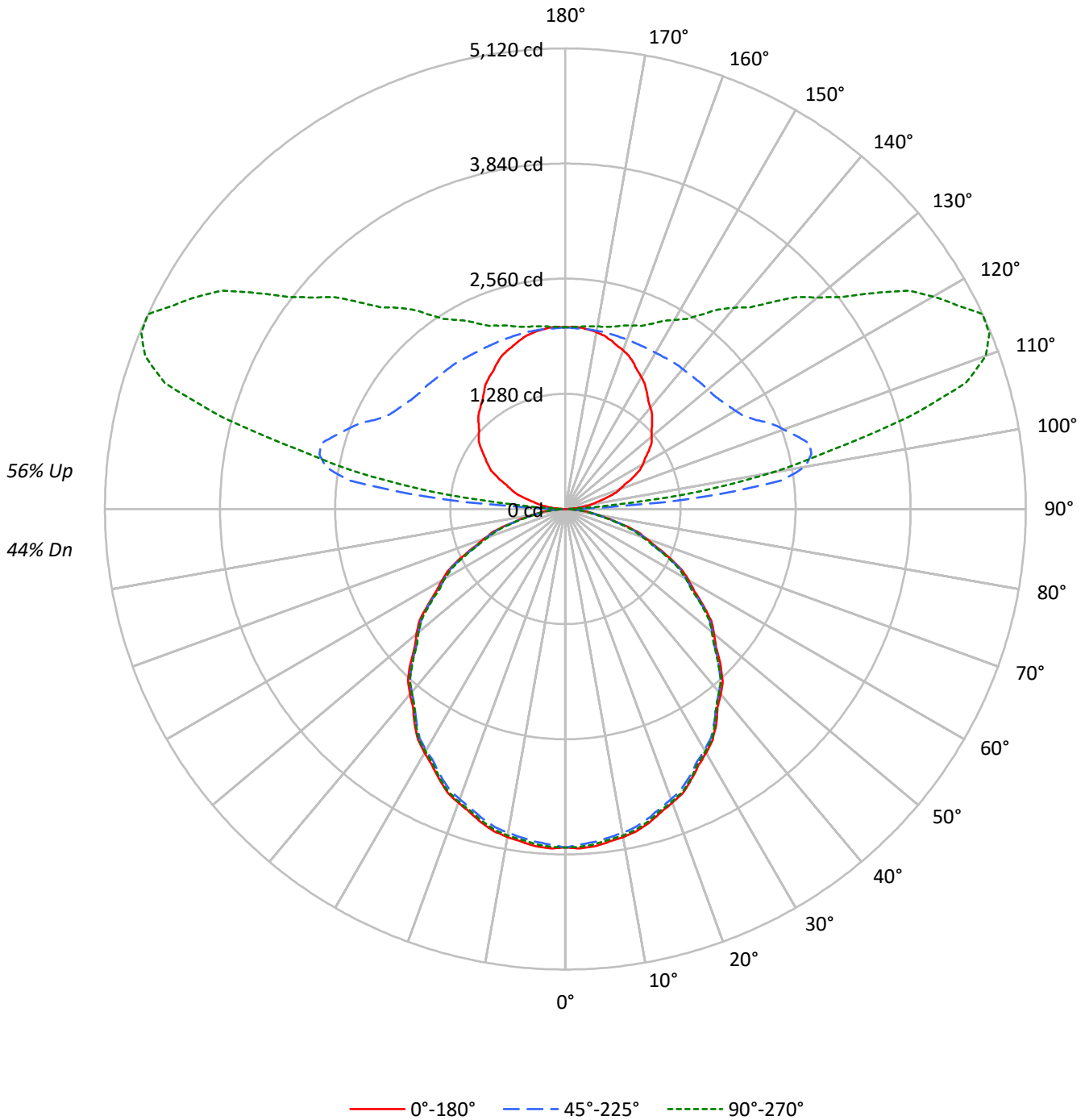
Lumens per Lamp: N/A  
Luminaire Lumens: 23299.9 lumens  
Efficiency: N/A  
Efficacy: 113.5 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35  
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')  
CIE Type: General Diffuse

Input Watts (W): 205.2  
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	106	106	106	106	97	97	97	97	80	80	80	65	65	65	51	51	51	44
1	96	92	88	85	88	84	81	78	70	68	66	57	55	54	45	44	43	37
2	88	80	74	69	80	74	69	64	61	58	54	50	47	45	39	38	36	31
3	80	71	63	57	73	65	59	53	54	49	45	44	41	38	35	32	30	26
4	73	62	54	48	67	57	50	45	48	43	39	39	35	32	31	28	26	22
5	67	55	47	41	61	51	44	39	43	37	33	35	31	28	28	25	23	19
6	62	50	42	36	56	46	39	33	38	33	29	32	28	24	25	22	20	17
7	57	45	37	31	52	41	34	29	35	29	25	29	25	21	23	20	18	15
8	53	41	33	28	48	38	31	26	32	26	22	26	22	19	21	18	16	13
9	49	37	30	24	45	34	28	23	29	24	20	24	20	17	19	16	14	12
10	46	34	27	22	42	31	25	21	27	22	18	22	18	15	18	15	13	11

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

	0°	45°	90°
0°	11573	11573	11573
5°	11625	11466	11553
10°	11566	11421	11510
15°	11496	11340	11430
20°	11377	11242	11335
25°	11253	11122	11209
30°	11116	10997	11052
35°	10977	10841	10899
40°	10794	10670	10680
45°	10604	10458	10424
50°	10331	10207	10182
55°	10026	9916	9846
60°	9723	9547	9516
65°	9247	9040	8965
70°	8593	8384	8221
75°	7672	7427	7273
80°	6312	6084	5809
85°	3737	4100	4192



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	355.2	1.5
10°-20°	1011.4	4.3
20°-30°	1518.9	6.5
30°-40°	1812.6	7.8
40°-50°	1857.9	8.0
50°-60°	1654.5	7.1
60°-70°	1233.3	5.3
70°-80°	667.7	2.9
80°-90°	156.7	0.7
90°-100°	944.3	4.1
100°-110°	2543.8	10.9
110°-120°	2669.6	11.5
120°-130°	2166.3	9.3
130°-140°	1699.0	7.3
140°-150°	1304.4	5.6
150°-160°	937.9	4.0
160°-170°	573.0	2.5
170°-180°	193.2	0.8
0°-30°	2885.4	12.4
0°-40°	4698.1	20.2
0°-60°	8210.5	35.2
0°-90°	10268.3	44.1
90°-120°	6157.8	26.4
90°-150°	11327.5	48.6
90°-180°	13032.0	55.9
0°-180°	23299.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	3763	3763	3763	3763	3763	
5°	3766	3758	3714	3748	3742	357
15°	3611	3598	3562	3590	3590	1017
25°	3316	3309	3278	3296	3303	1528
35°	2924	2911	2888	2893	2903	1825
45°	2438	2426	2404	2392	2397	1876
55°	1870	1872	1849	1831	1836	1674
65°	1271	1266	1242	1229	1232	1257
75°	646	638	625	612	612	688
85°	106	116	116	119	119	148
90°	5	15	31	33	33	13
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°	3763.0	3763.0	3763.0	3763.0	3763.0
2.5°	3777.5	3769.5	3736.2	3762.9	3759.0
5°	3765.6	3758.1	3714.0	3747.5	3742.4
7.5°	3730.5	3722.9	3684.1	3714.9	3710.4
10°	3703.7	3696.1	3657.2	3688.1	3685.6
12.5°	3668.5	3661.0	3622.1	3653.0	3650.5
15°	3610.7	3598.1	3561.6	3590.0	3590.0
17.5°	3534.3	3524.7	3490.9	3514.6	3515.1
20°	3476.4	3468.8	3435.1	3460.9	3463.5
22.5°	3418.5	3411.0	3373.1	3396.9	3401.5
25°	3316.3	3308.7	3277.5	3295.8	3303.3
27.5°	3210.9	3199.8	3169.0	3185.2	3190.7
30°	3130.3	3125.3	3096.7	3104.6	3112.2
32.5°	3045.6	3040.5	3016.2	3020.0	3033.7
35°	2923.7	2911.0	2887.6	2892.9	2903.0
37.5°	2779.6	2773.5	2750.6	2747.7	2757.4
40°	2688.7	2678.6	2657.7	2652.6	2660.3
42.5°	2589.5	2579.4	2554.3	2549.4	2559.0
45°	2438.1	2425.5	2404.5	2391.7	2396.8
47.5°	2268.7	2268.7	2247.0	2232.2	2239.8
50°	2159.2	2159.2	2133.3	2120.7	2128.2
52.5°	2045.6	2047.5	2019.7	2013.0	2010.4
55°	1869.9	1872.5	1849.3	1831.3	1836.3
57.5°	1700.4	1694.9	1668.0	1656.2	1658.6
60°	1580.7	1573.0	1552.2	1534.5	1547.1
62.5°	1458.8	1455.2	1434.4	1414.3	1412.8
65°	1270.7	1265.7	1242.3	1229.4	1232.0
67.5°	1083.8	1077.6	1056.3	1037.9	1044.4
70°	955.6	955.6	932.4	921.9	914.3
72.5°	837.8	827.7	810.5	795.9	790.3
75°	645.7	638.1	625.0	612.1	612.1
77.5°	470.0	463.5	455.1	446.3	443.7
80°	356.4	353.9	343.5	340.6	328.0
82.5°	251.1	250.6	244.3	237.6	237.1
85°	105.9	116.0	116.2	118.8	118.8
87.5°	19.6	33.8	35.1	31.5	31.5
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)