

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: P520211

Luminaire Tested: **SQ4-F-100U-075D-935-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P520211  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-23, 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-100U-075D-935-1D-UNV-STD-W-12  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE  
DOWNLIGHT 750 LUMENS PER FOOT  
UPLIGHT 1000 LUMENS PER FOOT  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

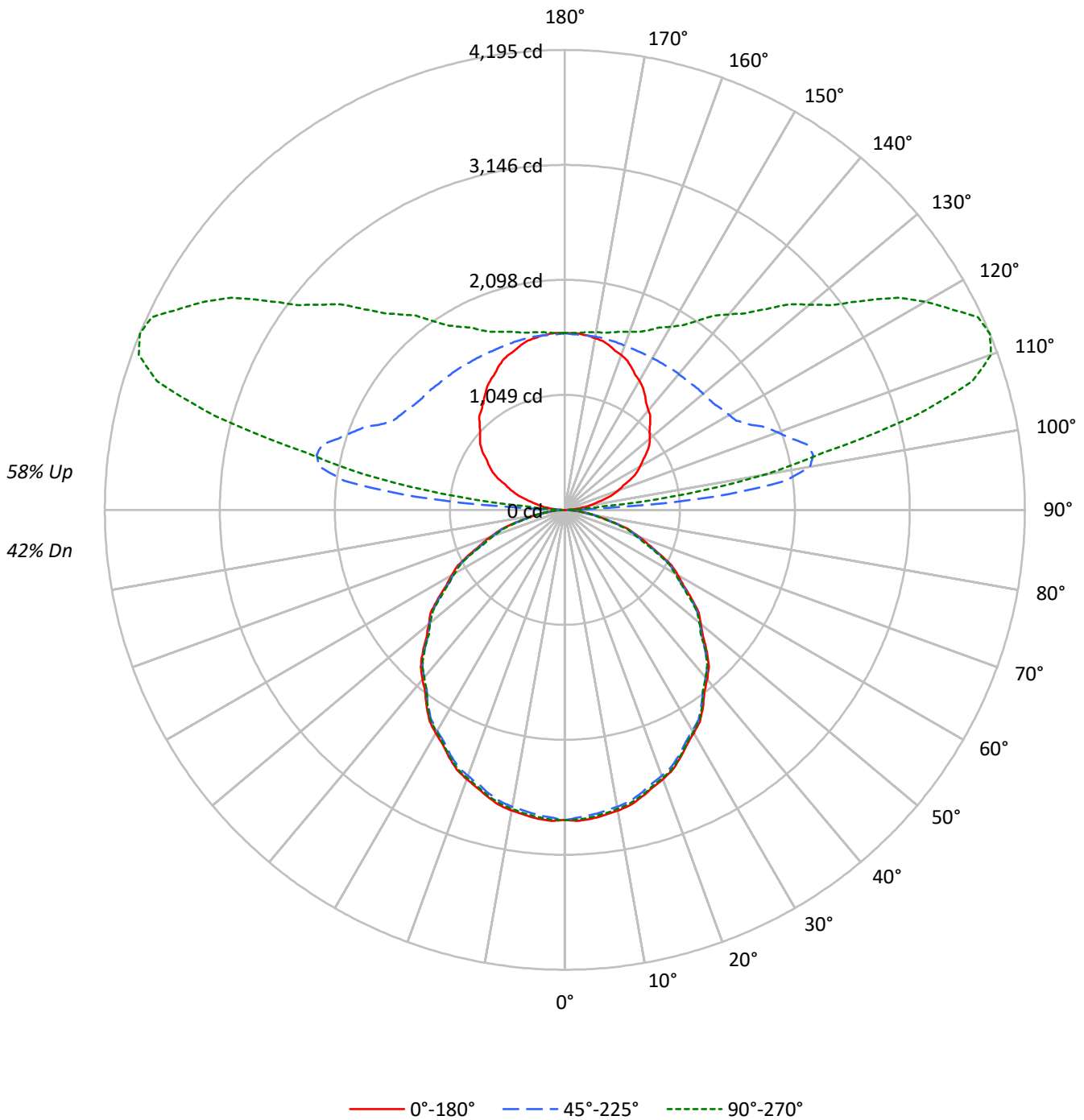
Lumens per Lamp: N/A  
Luminaire Lumens: 18196.4 lumens  
Efficiency: N/A  
Efficacy: 116.6 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35  
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')  
CIE Type: General Diffuse

Input Watts (W): 156  
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	96	96	96	96	79	79	79	64	64	64	49	49	49	42
1	96	92	88	84	88	84	81	78	69	67	65	56	54	53	43	42	42	36
2	87	80	74	69	80	73	68	64	61	57	54	49	46	44	38	36	35	30
3	80	70	63	57	72	64	58	53	53	49	45	43	40	37	34	31	30	25
4	73	62	54	48	66	57	50	45	47	42	38	38	35	32	30	28	25	22
5	67	55	47	41	61	51	44	38	42	37	33	34	30	27	27	24	22	19
6	61	49	41	36	56	45	38	33	38	33	29	31	27	24	24	22	19	16
7	57	45	37	31	52	41	34	29	34	29	25	28	24	21	22	19	17	14
8	53	40	33	27	48	37	30	26	31	26	22	26	22	19	20	18	15	13
9	49	37	29	24	45	34	27	23	29	23	20	24	20	17	19	16	14	12
10	46	34	27	22	42	31	25	20	26	21	18	22	18	15	17	15	12	10

**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	1.5
10°-20°	760.3	4.2
20°-30°	1142.3	6.3
30°-40°	1363.0	7.5
40°-50°	1397.8	7.7
50°-60°	1245.5	6.8
60°-70°	928.7	5.1
70°-80°	503.6	2.8
80°-90°	119.0	0.7
90°-100°	754.6	4.1
100°-110°	2083.1	11.4
110°-120°	2148.4	11.8
120°-130°	1726.4	9.5
130°-140°	1356.8	7.5
140°-150°	1040.6	5.7
150°-160°	747.9	4.1
160°-170°	457.4	2.5
170°-180°	154.2	0.8
0°-30°	2169.6	11.9
0°-40°	3532.6	19.4
0°-60°	6175.9	33.9
0°-90°	7727.2	42.5
90°-120°	4986.1	27.4
90°-150°	9109.8	50.1
90°-180°	10469.0	57.5
0°-180°	18196.4	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	10	21	23	26	10
95°	111	408	1369	563	366	119
105°	371	573	2292	3499	3295	395
115°	665	804	1846	3654	4156	654
125°	913	1039	1673	2832	3323	812
135°	1098	1217	1627	2293	2586	850
145°	1274	1362	1606	1952	2101	797
155°	1436	1484	1593	1752	1807	662
165°	1555	1575	1601	1663	1676	438
175°	1611	1614	1604	1627	1622	153
180°	1611	1611	1611	1611	1611	

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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	26.5	26.7	27.2	27.8
90°	5.1	10.2	20.6	23.2	25.8
92.5°	46.4	192.6	344.4	125.7	97.9
95°	110.9	408.3	1369.0	562.7	366.1
97.5°	183.6	457.3	2027.9	1561.3	1130.8
100°	237.2	486.7	2271.2	2287.3	1858.7
102.5°	288.8	520.1	2318.7	2826.1	2419.7
105°	371.3	572.9	2291.9	3499.0	3294.8
107.5°	458.9	638.3	2164.0	3823.4	3898.0
110°	520.7	682.1	2065.0	3893.2	4135.2

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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	576.4	731.7	1972.2	3838.1	4195.0
115°	665.2	803.7	1845.9	3654.2	4155.8
117.5°	742.5	880.6	1762.9	3395.4	3966.1
120°	794.0	930.2	1729.8	3220.1	3794.8
122.5°	843.5	973.6	1703.0	3056.5	3601.1
125°	912.7	1038.7	1673.2	2831.5	3323.1
127.5°	971.4	1097.4	1655.7	2641.3	3065.3
130°	1010.6	1136.6	1647.3	2525.0	2910.6
132.5°	1047.7	1167.7	1639.1	2427.1	2776.5
135°	1098.2	1216.7	1626.8	2293.4	2585.8
137.5°	1155.0	1262.8	1620.5	2181.0	2430.6
140°	1185.9	1291.8	1616.5	2106.0	2325.4
142.5°	1221.0	1318.7	1612.3	2039.5	2232.6
145°	1273.5	1361.8	1606.1	1952.4	2101.1
147.5°	1324.1	1401.2	1600.5	1878.9	1994.4
150°	1361.2	1424.3	1598.4	1835.1	1928.4
152.5°	1390.0	1449.1	1596.3	1797.6	1874.8
155°	1435.9	1483.8	1593.2	1751.7	1807.2
157.5°	1478.3	1515.1	1593.7	1718.4	1756.2
160°	1503.0	1535.8	1595.8	1699.6	1727.3
162.5°	1523.6	1552.4	1597.9	1683.0	1704.6
165°	1554.6	1574.7	1601.0	1663.2	1675.7
167.5°	1578.3	1590.4	1603.5	1651.1	1655.1
170°	1590.7	1600.8	1603.5	1644.8	1644.8
172.5°	1601.0	1607.0	1603.5	1636.5	1634.5
175°	1611.2	1613.8	1603.5	1626.7	1621.6
177.5°	1615.4	1613.4	1603.0	1617.4	1613.3
180°	1611.2	1611.2	1611.2	1611.2	1611.2

(END OF REPORT)