

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: P520195

Luminaire Tested: **SQ4-F-100U-075D-830-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P520195  
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-830-1D-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**

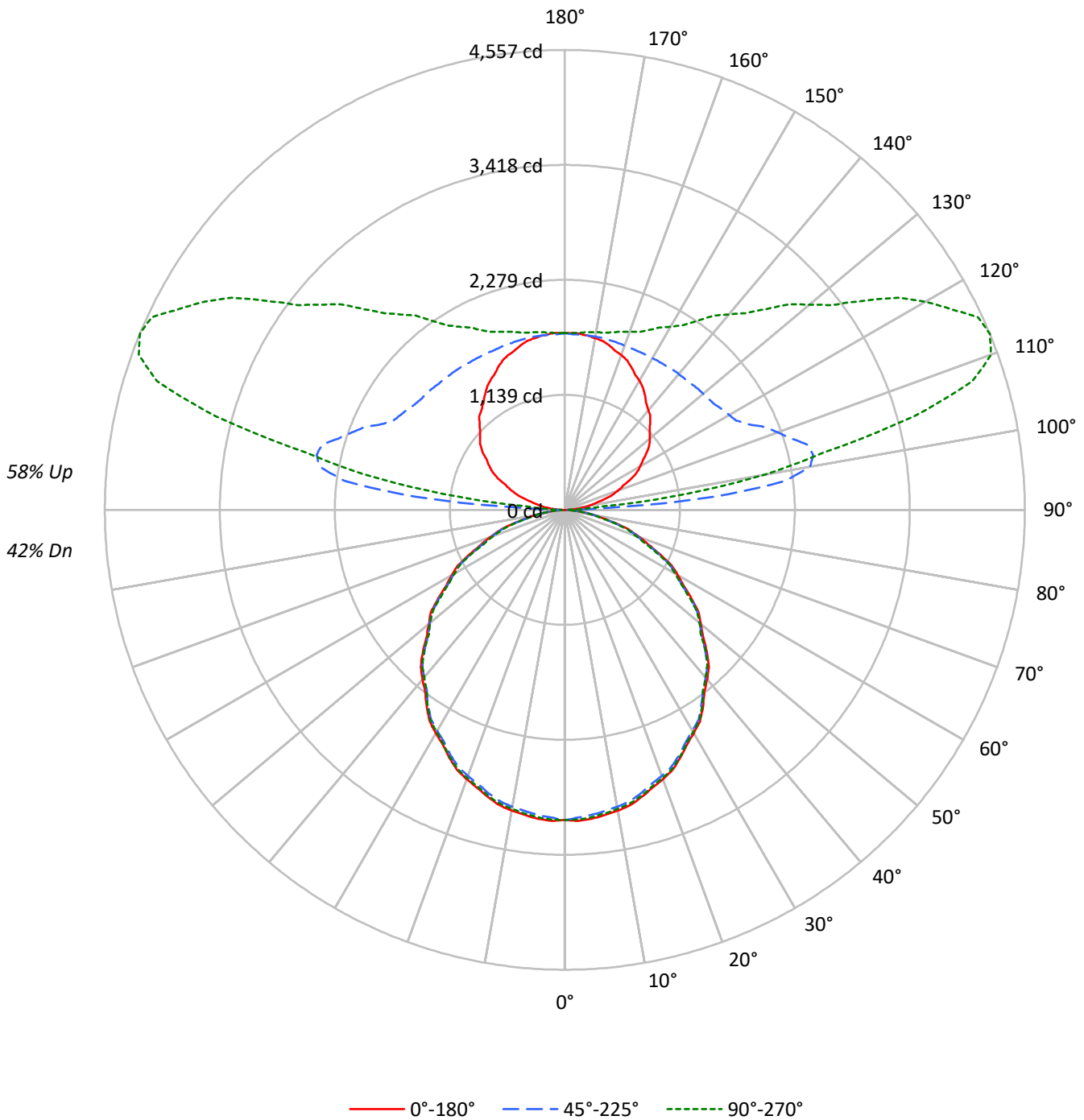
Lumens per Lamp: N/A  
Luminaire Lumens: 19767.0 lumens  
Efficiency: N/A  
Efficacy: 126.7 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35  
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')  
CIE Type: General Diffuse

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°	9452	9452	9452
5°	9488	9368	9437
10°	9450	9329	9398
15°	9378	9263	9342
20°	9293	9184	9257
25°	9191	9096	9163
30°	9074	8975	9025
35°	8955	8861	8903
40°	8804	8715	8703
45°	8653	8544	8569
50°	8413	8346	8346
55°	8217	8113	8038
60°	7953	7815	7747
65°	7524	7381	7280
70°	7066	6890	6715
75°	6357	6125	5992
80°	5085	4984	4936
85°	3049	3440	3539



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	290.1	1.5
10°-20°	825.9	4.2
20°-30°	1240.9	6.3
30°-40°	1480.6	7.5
40°-50°	1518.4	7.7
50°-60°	1353.0	6.8
60°-70°	1008.8	5.1
70°-80°	547.1	2.8
80°-90°	129.3	0.7
90°-100°	819.7	4.1
100°-110°	2262.9	11.4
110°-120°	2333.8	11.8
120°-130°	1875.4	9.5
130°-140°	1473.9	7.5
140°-150°	1130.4	5.7
150°-160°	812.4	4.1
160°-170°	496.8	2.5
170°-180°	167.5	0.8
0°-30°	2356.9	11.9
0°-40°	3837.5	19.4
0°-60°	6708.9	33.9
0°-90°	8394.1	42.5
90°-120°	5416.4	27.4
90°-150°	9896.1	50.1
90°-180°	11373.0	57.5
0°-180°	19767.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	3074	3074	3074	3074	3074	
5°	3074	3068	3034	3060	3057	292
15°	2945	2940	2909	2932	2934	831
25°	2708	2706	2681	2695	2700	1247
35°	2385	2380	2360	2360	2371	1490
45°	1990	1981	1964	1965	1970	1531
55°	1533	1530	1513	1499	1499	1369
65°	1034	1034	1014	1003	1000	1029
75°	535	524	516	507	504	562
85°	86	92	98	98	100	120
90°	6	11	22	25	28	11
95°	120	444	1487	611	398	129
105°	403	622	2490	3801	3579	429
115°	722	873	2005	3970	4514	710
125°	991	1128	1818	3076	3610	882
135°	1193	1322	1767	2491	2809	923
145°	1384	1479	1745	2121	2282	866
155°	1560	1612	1731	1903	1963	719
165°	1689	1711	1739	1807	1820	476
175°	1750	1753	1742	1767	1762	166
180°	1750	1750	1750	1750	1750	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	3073.5	3073.5	3073.5	3073.5	3073.5
2.5°	3084.7	3078.1	3051.3	3073.5	3071.4
5°	3073.5	3068.1	3034.5	3059.5	3056.9
7.5°	3048.5	3042.5	3009.5	3034.5	3034.0
10°	3026.2	3018.0	2987.2	3012.2	3009.5
12.5°	2997.3	2989.0	2958.2	2983.2	2980.5
15°	2945.4	2939.9	2909.2	2931.5	2934.3
17.5°	2886.3	2875.9	2848.4	2870.2	2873.0
20°	2839.5	2831.3	2806.1	2825.6	2828.4
22.5°	2790.4	2782.2	2757.0	2776.5	2779.3
25°	2708.5	2705.8	2680.7	2694.8	2700.2
27.5°	2619.9	2612.3	2592.0	2602.7	2608.3
30°	2555.3	2549.8	2527.4	2535.9	2541.3
32.5°	2488.4	2485.1	2465.0	2469.0	2476.7
35°	2385.3	2379.9	2360.2	2360.5	2371.4
37.5°	2271.0	2265.0	2248.8	2246.0	2250.4
40°	2193.0	2184.8	2170.7	2167.9	2167.9
42.5°	2112.8	2106.8	2088.3	2083.4	2089.9
45°	1989.6	1981.4	1964.5	1964.7	1970.1
47.5°	1856.4	1853.1	1833.5	1824.6	1826.8
50°	1758.3	1763.7	1744.3	1733.5	1744.3
52.5°	1673.6	1670.3	1653.0	1641.9	1646.3
55°	1532.6	1529.9	1513.1	1499.1	1499.1
57.5°	1391.1	1384.0	1366.6	1356.1	1364.3
60°	1293.0	1290.2	1270.6	1251.3	1259.5
62.5°	1194.8	1189.9	1170.3	1157.6	1163.7
65°	1033.9	1033.9	1014.3	1003.1	1000.4
67.5°	892.8	879.8	868.8	855.3	851.6
70°	785.8	774.9	766.3	755.0	746.8
72.5°	681.1	674.5	661.5	650.4	648.7
75°	535.0	524.1	515.5	507.1	504.3
77.5°	380.6	378.5	370.6	366.2	367.8
80°	287.1	287.1	281.4	281.3	278.7
82.5°	202.3	204.5	203.4	199.0	198.4
85°	86.4	91.8	97.5	97.6	100.3
87.5°	16.7	28.7	28.9	29.5	30.1
90°	5.6	11.1	22.4	25.2	28.0
92.5°	50.5	209.2	374.1	136.5	106.4
95°	120.4	443.6	1487.1	611.2	397.7
97.5°	199.4	496.8	2202.9	1696.0	1228.3
100°	257.7	528.7	2467.3	2484.7	2019.2
102.5°	313.7	565.0	2518.8	3070.0	2628.6
105°	403.3	622.3	2489.7	3801.0	3579.1
107.5°	498.5	693.4	2350.8	4153.4	4234.4
110°	565.7	740.9	2243.3	4229.2	4492.1



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	626.2	794.9	2142.4	4169.4	4557.1
115°	722.5	873.2	2005.2	3969.6	4514.5
117.5°	806.6	956.7	1915.0	3688.4	4308.4
120°	862.6	1010.5	1879.2	3498.1	4122.5
122.5°	916.3	1057.7	1850.0	3320.3	3911.9
125°	991.4	1128.3	1817.6	3076.0	3610.0
127.5°	1055.3	1192.2	1798.5	2869.3	3329.9
130°	1097.8	1234.7	1789.6	2742.9	3161.8
132.5°	1138.2	1268.5	1780.6	2636.7	3016.2
135°	1193.0	1321.8	1767.1	2491.3	2809.0
137.5°	1254.6	1371.8	1760.4	2369.3	2640.4
140°	1288.3	1403.3	1756.0	2287.9	2526.1
142.5°	1326.3	1432.6	1751.5	2215.6	2425.3
145°	1383.5	1479.3	1744.8	2120.9	2282.4
147.5°	1438.4	1522.2	1738.6	2041.2	2166.5
150°	1478.7	1547.1	1736.4	1993.5	2094.9
152.5°	1510.0	1574.1	1734.1	1952.8	2036.6
155°	1559.9	1611.9	1730.7	1903.0	1963.2
157.5°	1605.9	1645.9	1731.3	1866.7	1907.7
160°	1632.7	1668.3	1733.5	1846.3	1876.3
162.5°	1655.2	1686.3	1735.8	1828.2	1851.7
165°	1688.8	1710.7	1739.1	1806.7	1820.4
167.5°	1714.5	1727.7	1741.9	1793.6	1798.0
170°	1728.0	1738.9	1741.9	1786.7	1786.7
172.5°	1739.1	1745.8	1741.9	1777.7	1775.5
175°	1750.3	1753.1	1741.9	1767.0	1761.6
177.5°	1754.9	1752.7	1741.4	1757.0	1752.6
180°	1750.3	1750.3	1750.3	1750.3	1750.3

(END OF REPORT)