

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: P520226

Luminaire Tested: **SQ4-F-100U-100D-835-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P520226  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-23, 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-100U-100D-835-1D-UNV-STD-W-8  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE  
DOWNLIGHT 1000 LUMENS PER FOOT  
UPLIGHT 1000 LUMENS PER FOOT  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

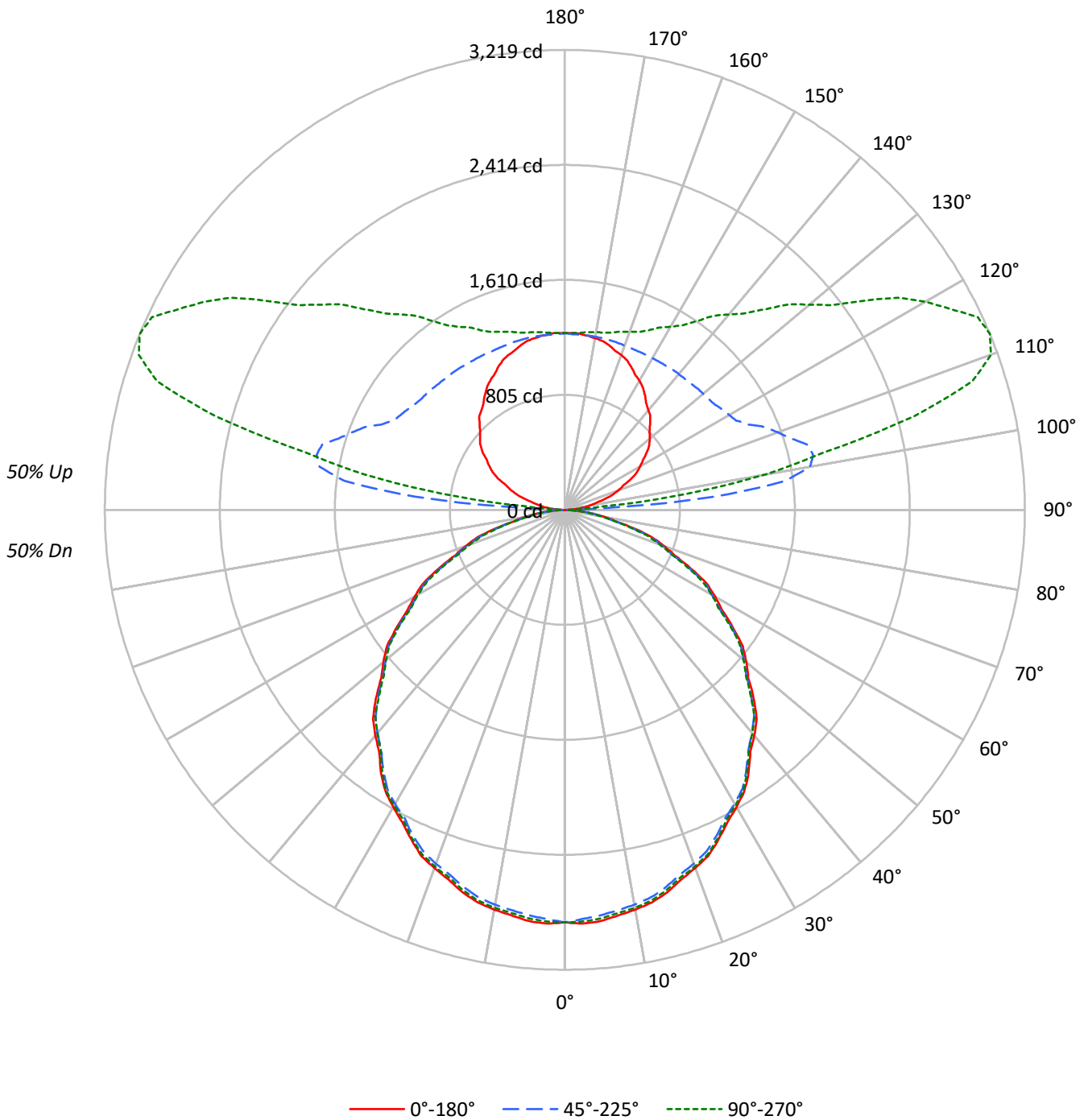
Lumens per Lamp: N/A  
Luminaire Lumens: 15910.0 lumens  
Efficiency: N/A  
Efficacy: 132.8 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35  
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')  
CIE Type: General Diffuse

Input Watts (W): 119.8  
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	107	107	107	107	99	99	99	99	83	83	83	69	69	69	56	56	56	50
1	98	93	89	86	90	86	83	80	73	70	68	61	59	57	49	48	47	42
2	89	81	75	70	82	75	70	65	64	60	56	53	50	48	43	41	39	35
3	81	71	64	58	74	66	60	55	56	51	47	47	43	40	38	36	33	29
4	74	63	55	49	68	59	52	46	50	44	40	42	38	34	34	31	29	25
5	68	56	48	42	62	52	45	40	44	39	35	37	33	30	31	27	25	22
6	63	50	42	36	57	47	40	34	40	34	30	34	29	26	28	24	22	19
7	58	45	37	32	53	42	35	30	36	31	26	31	26	23	25	22	19	17
8	54	41	33	28	49	38	31	27	33	27	23	28	24	20	23	20	17	15
9	50	38	30	25	46	35	28	24	30	25	21	26	21	18	21	18	16	14
10	47	34	27	22	43	32	26	21	28	23	19	24	19	17	20	17	14	12

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

	0°	45°	90°
0°	13319	13319	13319
5°	13379	13196	13297
10°	13311	13144	13246
15°	13230	13051	13155
20°	13094	12939	13046
25°	12951	12800	12901
30°	12794	12656	12720
35°	12633	12477	12544
40°	12423	12279	12291
45°	12204	12036	11997
50°	11890	11747	11719
55°	11539	11412	11331
60°	11190	10988	10952
65°	10643	10405	10317
70°	9889	9649	9462
75°	8830	8548	8370
80°	7266	7003	6687
85°	4298	4721	4827



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	272.5	1.7
10°-20°	776.0	4.9
20°-30°	1165.4	7.3
30°-40°	1390.7	8.7
40°-50°	1425.5	9.0
50°-60°	1269.4	8.0
60°-70°	946.3	5.9
70°-80°	512.3	3.2
80°-90°	119.2	0.7
90°-100°	578.9	3.6
100°-110°	1598.3	10.0
110°-120°	1648.4	10.4
120°-130°	1324.6	8.3
130°-140°	1041.0	6.5
140°-150°	798.4	5.0
150°-160°	573.8	3.6
160°-170°	350.9	2.2
170°-180°	118.3	0.7
0°-30°	2213.9	13.9
0°-40°	3604.6	22.7
0°-60°	6299.6	39.6
0°-90°	7877.4	49.5
90°-120°	3825.6	24.0
90°-150°	6989.6	43.9
90°-180°	8033.0	50.5
0°-180°	15910.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2887	2887	2887	2887	2887	
5°	2889	2883	2850	2875	2871	274
15°	2770	2761	2733	2754	2754	780
25°	2544	2539	2515	2529	2534	1172
35°	2243	2234	2216	2220	2227	1400
45°	1871	1861	1845	1835	1839	1439
55°	1435	1437	1419	1405	1409	1284
65°	975	971	953	943	945	964
75°	495	490	480	470	470	528
85°	81	89	89	91	91	114
90°	4	8	16	18	20	8
95°	85	313	1050	432	281	91
105°	285	440	1758	2684	2528	303
115°	510	617	1416	2804	3188	501
125°	700	797	1284	2172	2550	623
135°	843	934	1248	1760	1984	652
145°	977	1045	1232	1498	1612	612
155°	1102	1138	1222	1344	1387	508
165°	1193	1208	1228	1276	1286	336
175°	1236	1238	1230	1248	1244	117
180°	1236	1236	1236	1236	1236	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2887.3	2887.3	2887.3	2887.3	2887.3
2.5°	2898.4	2892.1	2866.6	2887.2	2884.1
5°	2889.2	2883.4	2849.6	2875.3	2871.4
7.5°	2862.3	2856.4	2826.6	2850.3	2846.8
10°	2841.7	2835.8	2806.0	2829.8	2827.8
12.5°	2814.7	2808.9	2779.1	2802.8	2800.9
15°	2770.3	2760.6	2732.7	2754.5	2754.5
17.5°	2711.7	2704.4	2678.4	2696.6	2697.0
20°	2667.3	2661.4	2635.6	2655.4	2657.4
22.5°	2622.9	2617.1	2588.0	2606.4	2609.8
25°	2544.4	2538.6	2514.7	2528.7	2534.5
27.5°	2463.6	2455.1	2431.5	2443.9	2448.1
30°	2401.8	2397.9	2376.0	2382.0	2387.9
32.5°	2336.8	2332.9	2314.2	2317.1	2327.6
35°	2243.2	2233.5	2215.5	2219.6	2227.4
37.5°	2132.6	2128.0	2110.5	2108.3	2115.6
40°	2062.9	2055.2	2039.1	2035.2	2041.1
42.5°	1986.8	1979.1	1959.8	1956.1	1963.4
45°	1870.7	1861.0	1844.9	1835.1	1839.0
47.5°	1740.7	1740.7	1724.0	1712.6	1718.5
50°	1656.7	1656.7	1636.8	1627.0	1632.9
52.5°	1569.5	1571.0	1549.6	1544.5	1542.5
55°	1434.7	1436.7	1418.9	1405.1	1408.9
57.5°	1304.7	1300.5	1279.7	1270.6	1272.6
60°	1212.8	1206.9	1191.0	1177.3	1187.0
62.5°	1119.2	1116.6	1100.6	1085.1	1084.0
65°	975.0	971.1	953.2	943.3	945.2
67.5°	831.5	826.8	810.5	796.3	801.4
70°	733.2	733.2	715.4	707.3	701.5
72.5°	642.8	635.1	621.8	610.6	606.4
75°	495.4	489.6	479.6	469.6	469.6
77.5°	360.7	355.6	349.2	342.4	340.4
80°	273.5	271.5	263.6	261.4	251.7
82.5°	192.6	192.2	187.5	182.3	181.9
85°	81.2	89.0	89.2	91.2	91.2
87.5°	15.1	25.2	25.4	22.6	23.0
90°	4.0	7.8	15.8	17.8	19.8
92.5°	35.6	147.8	264.2	96.4	75.2
95°	85.1	313.3	1050.4	431.7	280.8
97.5°	140.9	350.9	1555.9	1197.9	867.5
100°	182.0	373.4	1742.6	1755.0	1426.2
102.5°	221.6	399.1	1779.0	2168.4	1856.6
105°	284.8	439.6	1758.4	2684.5	2527.9
107.5°	352.1	489.8	1660.4	2933.5	2990.8
110°	399.5	523.3	1584.4	2987.0	3172.7



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	442.3	561.4	1513.2	2944.8	3218.6
115°	510.3	616.7	1416.3	2803.7	3188.5
117.5°	569.7	675.6	1352.6	2605.1	3043.0
120°	609.3	713.7	1327.2	2470.7	2911.7
122.5°	647.2	747.1	1306.7	2345.1	2762.9
125°	700.3	796.9	1283.7	2172.5	2549.7
127.5°	745.3	842.0	1270.3	2026.6	2351.9
130°	775.3	872.1	1263.9	1937.3	2233.2
132.5°	803.8	895.9	1257.6	1862.3	2130.4
135°	842.6	933.5	1248.1	1759.6	1984.0
137.5°	886.1	968.9	1243.3	1673.5	1864.9
140°	909.9	991.1	1240.2	1615.9	1784.2
142.5°	936.8	1011.9	1237.0	1564.8	1712.9
145°	977.1	1044.8	1232.3	1498.0	1612.1
147.5°	1015.9	1075.1	1227.9	1441.6	1530.2
150°	1044.4	1092.8	1226.3	1408.1	1479.6
152.5°	1066.6	1111.8	1224.8	1379.3	1438.4
155°	1101.8	1138.5	1222.4	1344.1	1386.6
157.5°	1134.2	1162.4	1222.8	1318.4	1347.4
160°	1153.2	1178.4	1224.4	1304.0	1325.3
162.5°	1169.1	1191.0	1225.9	1291.2	1307.8
165°	1192.8	1208.2	1228.3	1276.1	1285.7
167.5°	1210.9	1220.2	1230.3	1266.8	1269.9
170°	1220.4	1228.2	1230.3	1261.9	1261.9
172.5°	1228.3	1233.0	1230.3	1255.6	1254.0
175°	1236.2	1238.2	1230.3	1248.1	1244.1
177.5°	1239.4	1237.9	1229.9	1241.0	1237.8
180°	1236.2	1236.2	1236.2	1236.2	1236.2

(END OF REPORT)