

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: P520322

Luminaire Tested: **SQ4-F-125U-100D-835-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P520322  
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-835-1D-UNV-STD-W-8  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE  
DOWNLIGHT 1000 LUMENS PER FOOT  
UPLIGHT 1250 LUMENS PER FOOT  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

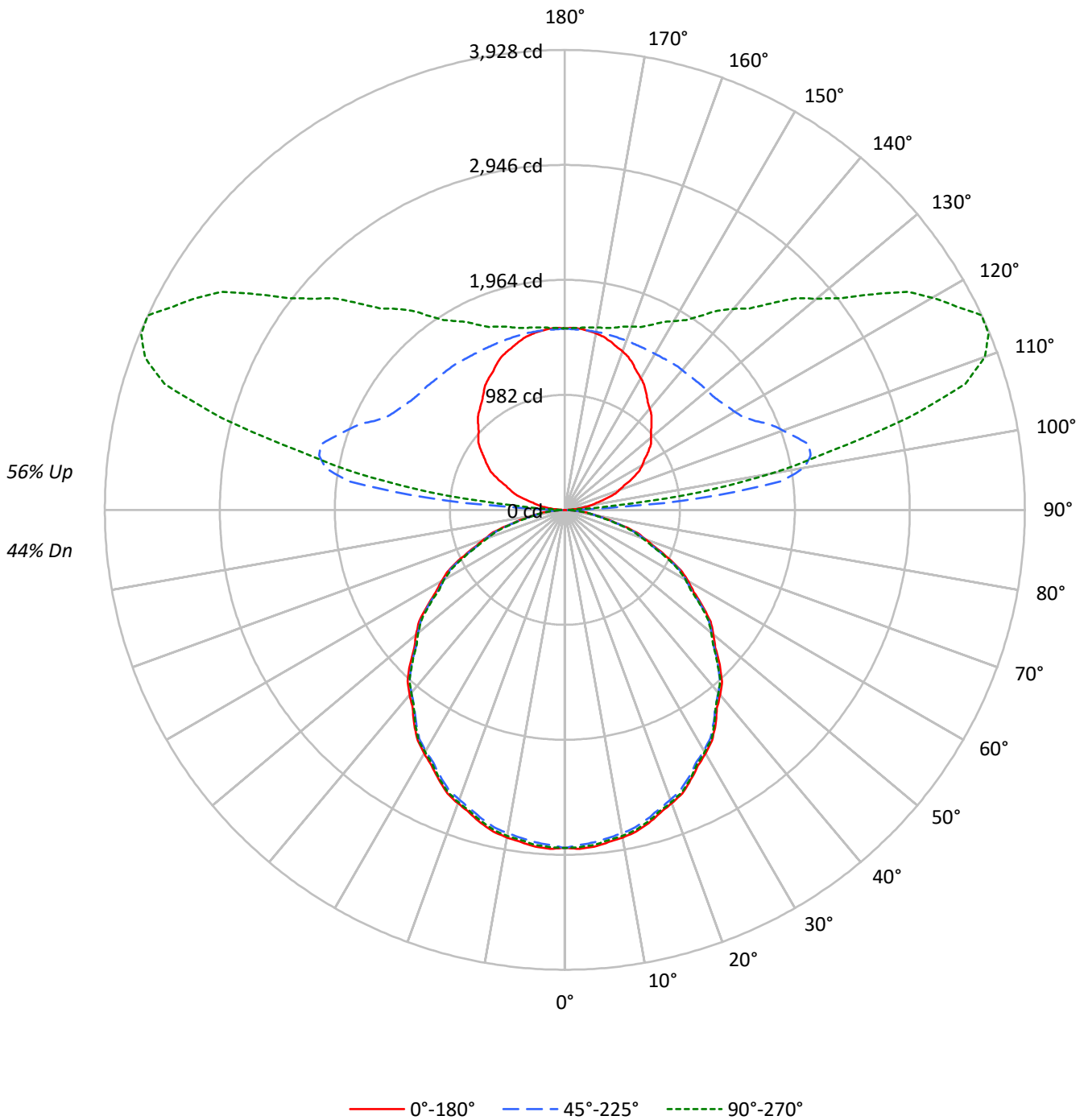
Lumens per Lamp: N/A  
Luminaire Lumens: 17877.1 lumens  
Efficiency: N/A  
Efficacy: 145.1 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35  
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')  
CIE Type: General Diffuse

Input Watts (W): 123.2  
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°	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	1.5
10°-20°	776.0	4.3
20°-30°	1165.4	6.5
30°-40°	1390.7	7.8
40°-50°	1425.5	8.0
50°-60°	1269.4	7.1
60°-70°	946.3	5.3
70°-80°	512.3	2.9
80°-90°	120.3	0.7
90°-100°	724.6	4.1
100°-110°	1951.8	10.9
110°-120°	2048.3	11.5
120°-130°	1662.2	9.3
130°-140°	1303.6	7.3
140°-150°	1000.8	5.6
150°-160°	719.6	4.0
160°-170°	439.6	2.5
170°-180°	148.3	0.8
0°-30°	2213.9	12.4
0°-40°	3604.6	20.2
0°-60°	6299.6	35.2
0°-90°	7878.5	44.1
90°-120°	4724.6	26.4
90°-150°	8691.2	48.6
90°-180°	9999.0	55.9
0°-180°	17877.1	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	12	24	26	26	10
95°	110	394	1188	607	420	115
105°	361	562	2158	3229	3031	380
115°	637	780	1797	3473	3928	627
125°	870	999	1614	2728	3210	777
135°	1048	1169	1569	2201	2492	809
145°	1212	1306	1549	1882	2020	760
155°	1375	1425	1535	1688	1742	633
165°	1492	1509	1541	1602	1610	421
175°	1551	1549	1543	1564	1561	147
180°	1549	1549	1549	1549	1549	



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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	26.0	27.0	24.2	24.2
90°	3.9	11.6	23.7	25.7	25.7
92.5°	48.2	170.1	336.2	161.8	112.5
95°	110.5	394.1	1187.8	607.4	420.2
97.5°	176.4	451.1	1862.9	1556.3	1173.6
100°	226.9	473.8	2077.6	2173.7	1803.3
102.5°	275.8	505.8	2148.7	2636.2	2332.1
105°	361.0	561.7	2158.5	3229.3	3030.6
107.5°	441.6	620.6	2066.6	3534.1	3585.4
110°	495.2	665.0	1982.9	3628.7	3815.8

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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	552.1	709.4	1902.4	3607.8	3915.3
115°	637.3	780.1	1797.4	3473.0	3928.3
117.5°	715.1	848.9	1716.2	3257.9	3764.9
120°	765.5	894.8	1675.1	3103.6	3624.5
122.5°	809.7	937.5	1645.2	2945.7	3465.1
125°	870.1	999.3	1614.0	2727.9	3210.2
127.5°	928.1	1055.5	1594.2	2535.7	2966.3
130°	962.8	1090.1	1586.3	2425.5	2803.7
132.5°	997.6	1123.4	1578.4	2328.6	2675.9
135°	1047.7	1169.3	1568.6	2200.7	2492.0
137.5°	1095.5	1212.0	1563.5	2092.1	2331.3
140°	1128.6	1240.5	1558.7	2025.3	2241.3
142.5°	1163.3	1267.4	1555.6	1963.0	2145.1
145°	1211.5	1306.0	1548.8	1881.5	2020.4
147.5°	1263.5	1345.7	1542.1	1813.0	1922.1
150°	1298.2	1369.7	1539.0	1769.9	1860.6
152.5°	1329.8	1392.0	1537.4	1734.7	1808.5
155°	1375.2	1425.4	1535.0	1688.2	1742.1
157.5°	1415.0	1454.0	1535.4	1655.4	1691.7
160°	1440.3	1473.1	1537.0	1636.3	1663.3
162.5°	1462.4	1489.1	1538.6	1620.3	1639.6
165°	1491.6	1509.0	1541.0	1602.3	1610.0
167.5°	1515.3	1525.4	1542.9	1588.4	1591.5
170°	1531.1	1534.9	1542.9	1580.4	1580.4
172.5°	1540.6	1541.3	1544.5	1572.5	1572.5
175°	1550.8	1548.8	1542.9	1564.5	1560.7
177.5°	1555.2	1552.1	1544.1	1556.6	1553.6
180°	1548.8	1548.8	1548.8	1548.8	1548.8

(END OF REPORT)