

Scaled data based on original data using  
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State  
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: CORELITE

Report Number: P844974

Luminaire Tested: **SQ4P-F-150U-125D-B40-1D-UNV**

Issue Date: 8/14/2023



**Test Information**

Test Method: LM-79-08  
Report Number: P844974  
REPORT IS A COMBINATION OF REPORTS P700138 AND P700248  
Test Lab: INNOVATION CENTER  
Issue Date: 8/14/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: SQ4P-F-150U-125D-B40-1D-UNV  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, 1500 LUMENS PER FOOT UPLIGHT, 1250 LUMENS PER FOOT DOWNLIGHT  
  
Light Source: -  
Ballast/Driver: -

**Summary**

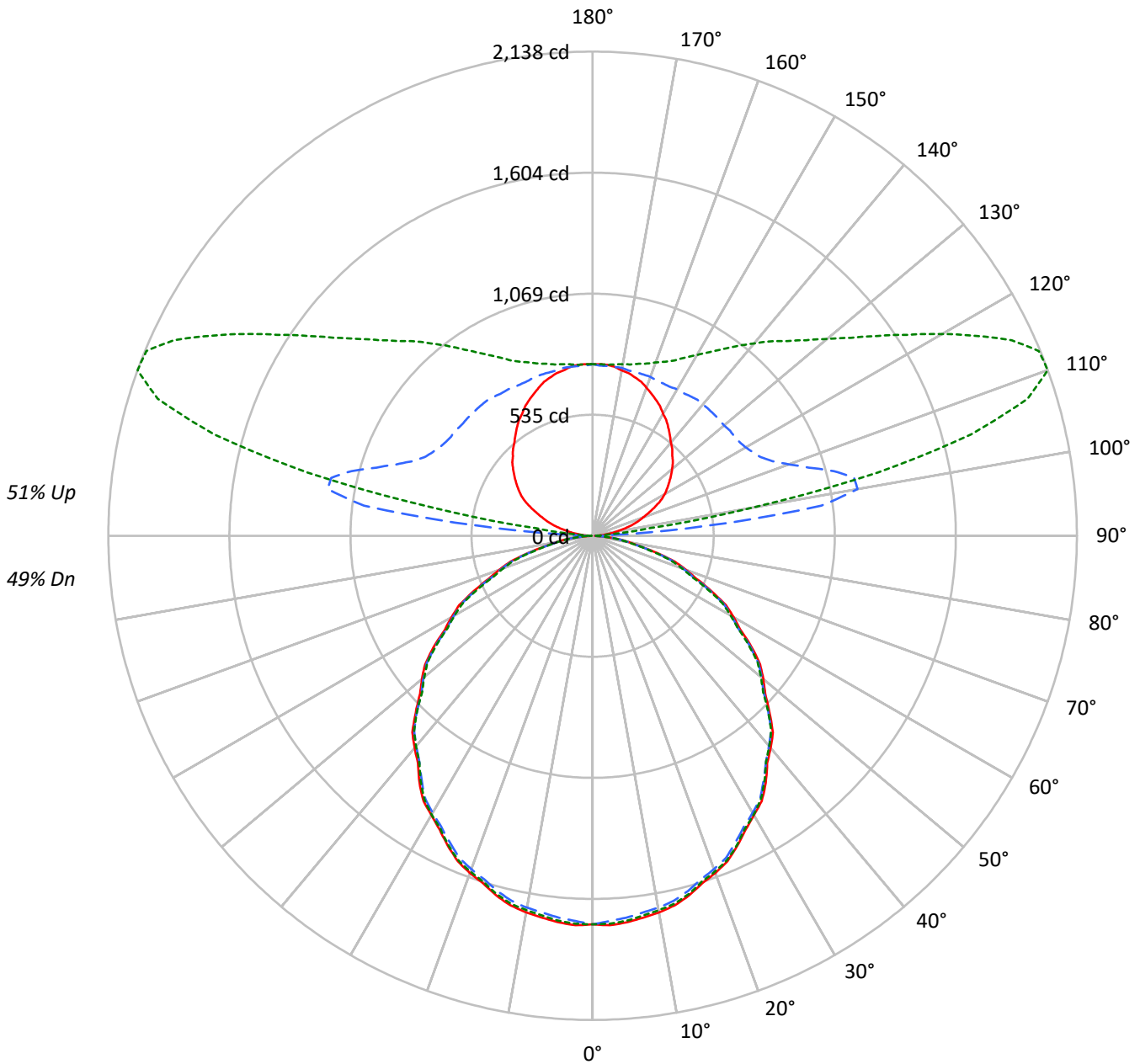
Lumens per Lamp: N/A  
Luminaire Lumens: 9603.9 lumens  
Efficiency: N/A  
Efficacy: 108.2 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35  
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')  
CIE Type: General Diffuse

Input Watts (W): 88.8  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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: 25 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	50	30	10	0					
RCR																										
0	107	107	107	107	98	98	98	98	83	83	83	68	68	68	55	55	55	49				49				
1	98	93	89	86	90	86	83	80	72	70	68	60	58	57	49	47	46				41					
2	89	81	75	70	81	75	70	65	63	59	56	53	50	47	43	41	39				34					
3	81	71	64	58	74	66	60	54	56	51	47	46	43	40	38	35	33				29					
4	74	63	55	49	68	58	51	46	50	44	40	41	37	34	34	31	28				25					
5	68	56	48	42	62	52	45	39	44	39	34	37	33	29	30	27	25				21					
6	62	50	42	36	57	47	39	34	40	34	30	33	29	26	27	24	22				19					
7	58	45	37	32	53	42	35	30	36	30	26	30	26	23	25	22	19				17					
8	53	41	33	28	49	38	31	26	33	27	23	28	23	20	23	20	17				15					
9	50	37	30	25	46	35	28	24	30	25	21	25	21	18	21	18	15				13					
10	46	34	27	22	43	32	26	21	28	22	19	24	19	16	20	16	14				12					

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

	0°	45°	90°
0°	15831	15831	15831
5°	15872	15681	15807
10°	15817	15624	15732
15°	15709	15512	15645
20°	15560	15381	15494
25°	15386	15200	15342
30°	15173	15050	15147
35°	15009	14828	14903
40°	14723	14580	14609
45°	14417	14298	14298
50°	14112	13982	13916
55°	13784	13599	13526
60°	13269	13057	12974
65°	12636	12387	12234
70°	11775	11521	11276
75°	10559	10234	9988
80°	8549	8432	8177
85°	5081	5843	6076



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	161.9	1.7
10°-20°	461.1	4.8
20°-30°	692.5	7.2
30°-40°	826.7	8.6
40°-50°	847.1	8.8
50°-60°	755.5	7.9
60°-70°	562.6	5.9
70°-80°	305.4	3.2
80°-90°	72.5	0.8
90°-100°	301.6	3.1
100°-110°	1049.5	10.9
110°-120°	1016.6	10.6
120°-130°	797.5	8.3
130°-140°	631.2	6.6
140°-150°	487.1	5.1
150°-160°	349.2	3.6
160°-170°	213.6	2.2
170°-180°	72.2	0.8
0°-30°	1315.5	13.7
0°-40°	2142.1	22.3
0°-60°	3744.7	39.0
0°-90°	4685.3	48.8
90°-120°	2367.8	24.7
90°-150°	4283.6	44.6
90°-180°	4919.0	51.2
0°-180°	9603.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1716	1716	1716	1716	1716	
5°	1714	1711	1693	1709	1707	163
15°	1645	1640	1624	1638	1638	463
25°	1511	1507	1493	1502	1507	696
35°	1333	1328	1316	1316	1323	831
45°	1105	1107	1096	1093	1096	853
55°	857	857	845	839	841	763
65°	579	577	567	560	560	573
75°	296	294	287	283	280	313
85°	48	52	55	57	57	67
90°	11	17	17	11	6	8
95°	51	175	509	130	79	54
105°	175	249	1103	1861	1731	184
115°	305	368	820	1731	2042	302
125°	413	509	764	1290	1538	370
135°	498	560	758	1075	1216	386
145°	583	622	752	928	1007	364
155°	662	684	741	826	854	305
165°	724	730	747	780	786	204
175°	758	758	752	764	758	72
180°	758	758	758	758	758	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1715.9	1715.9	1715.9	1715.9	1715.9
2.5°	1721.3	1717.9	1703.1	1715.9	1714.4
5°	1713.8	1711.4	1693.1	1708.9	1706.8
7.5°	1701.2	1696.9	1678.7	1694.5	1692.1
10°	1688.3	1683.7	1667.7	1681.3	1679.2
12.5°	1672.0	1669.3	1651.4	1665.0	1664.5
15°	1644.6	1640.0	1624.0	1637.9	1637.9
17.5°	1608.9	1606.3	1590.5	1603.6	1602.2
20°	1584.8	1580.5	1566.6	1578.1	1578.1
22.5°	1555.6	1552.9	1539.3	1548.7	1550.5
25°	1511.4	1507.1	1493.1	1502.5	1507.1
27.5°	1462.9	1459.4	1447.9	1453.7	1457.0
30°	1424.2	1424.2	1412.7	1415.1	1421.8
32.5°	1389.3	1389.3	1376.0	1378.4	1381.6
35°	1332.6	1328.0	1316.5	1316.5	1323.2
37.5°	1266.1	1263.9	1256.7	1255.3	1257.2
40°	1222.4	1220.0	1210.6	1213.0	1213.0
42.5°	1178.1	1175.7	1166.4	1163.4	1166.8
45°	1104.9	1107.3	1095.8	1093.4	1095.8
47.5°	1033.0	1033.0	1023.7	1017.2	1020.7
50°	983.2	983.2	974.1	969.5	969.5
52.5°	931.8	933.6	922.4	916.2	918.0
55°	856.9	856.9	845.4	838.6	840.9
57.5°	774.1	774.1	762.7	755.9	759.8
60°	719.1	719.1	707.6	700.6	703.1
62.5°	663.9	663.9	652.6	645.6	645.9
65°	578.8	576.7	567.4	560.4	560.4
67.5°	497.1	491.2	484.2	475.1	475.1
70°	436.5	434.0	427.1	418.0	418.0
72.5°	381.2	377.3	370.3	363.0	363.0
75°	296.2	293.8	287.1	282.6	280.2
77.5°	212.3	210.5	209.9	203.5	205.3
80°	160.9	160.9	158.7	153.9	153.9
82.5°	114.7	116.7	112.6	111.5	109.7
85°	48.0	52.5	55.2	57.4	57.4
87.5°	9.4	14.4	12.9	14.7	14.7
90°	11.3	17.0	17.0	11.3	5.6
92.5°	28.3	84.8	79.2	33.9	28.3
95°	50.9	175.3	509.0	130.0	79.2
97.5°	79.2	198.0	1018.1	463.8	248.9
100°	107.5	209.2	1187.8	1114.2	718.3
102.5°	141.4	226.3	1182.1	1566.7	1289.5
105°	175.3	248.9	1102.9	1860.8	1730.7



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	271.4	333.7	859.7	1872.1	2132.2
115°	305.4	367.7	820.1	1730.7	2041.8
117.5°	339.4	407.2	797.4	1600.6	1911.7
120°	367.7	441.1	780.5	1476.2	1781.6
122.5°	390.2	475.1	769.2	1374.4	1651.5
125°	412.9	509.0	763.5	1289.5	1538.4
127.5°	435.5	531.6	763.5	1227.3	1436.6
130°	458.2	543.0	757.9	1165.1	1351.7
132.5°	480.8	548.6	757.9	1119.8	1278.2
135°	497.7	559.9	757.9	1074.6	1216.0
137.5°	520.4	571.3	757.9	1035.1	1165.1
140°	537.3	588.2	757.9	995.4	1108.5
142.5°	559.9	605.2	757.9	955.9	1057.6
145°	582.6	622.1	752.2	927.6	1006.8
147.5°	605.2	639.1	746.6	899.3	961.5
150°	622.1	656.1	746.6	871.0	921.9
152.5°	644.8	673.0	740.9	842.7	888.0
155°	661.8	684.4	740.9	825.7	854.0
157.5°	678.7	701.3	740.9	808.8	831.5
160°	695.7	712.6	746.6	797.4	814.4
162.5°	712.6	724.0	746.6	786.2	797.4
165°	724.0	729.6	746.6	780.5	786.2
167.5°	735.2	740.9	746.6	774.9	774.9
170°	740.9	746.6	752.2	769.2	769.2
172.5°	752.2	752.2	752.2	763.5	763.5
175°	757.9	757.9	752.2	763.5	757.9
177.5°	757.9	757.9	752.2	763.5	757.9
180°	757.9	757.9	757.9	757.9	757.9



Report Generated By 670246072 / DESKTOP-50001EG







— 0°-180°    - - 45°-225°    - - - - 90°-270°







107.5°	209.2	277.2	1001.1	1990.8	2013.5
110°	237.5	305.4	921.9	1973.9	2137.9



(END OF REPORT)