

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: P844926

Luminaire Tested: **SQ4P-F-075U-125D-B40-1D-UNV**

Issue Date: 8/14/2023

**Test Information**

Test Method: LM-79-08  
Report Number: P844926  
REPORT IS A COMBINATION OF REPORTS P700222 AND P700245  
Test Lab: INNOVATION CENTER  
Issue Date: 8/14/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: SQ4P-F-075U-125D-B40-1D-UNV  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, 750 LUMENS PER FOOT  
UPLIGHT, 1250 LUMENS PER FOOT DOWNLIGHT  
  
Light Source: -  
Ballast/Driver: -

**Summary**

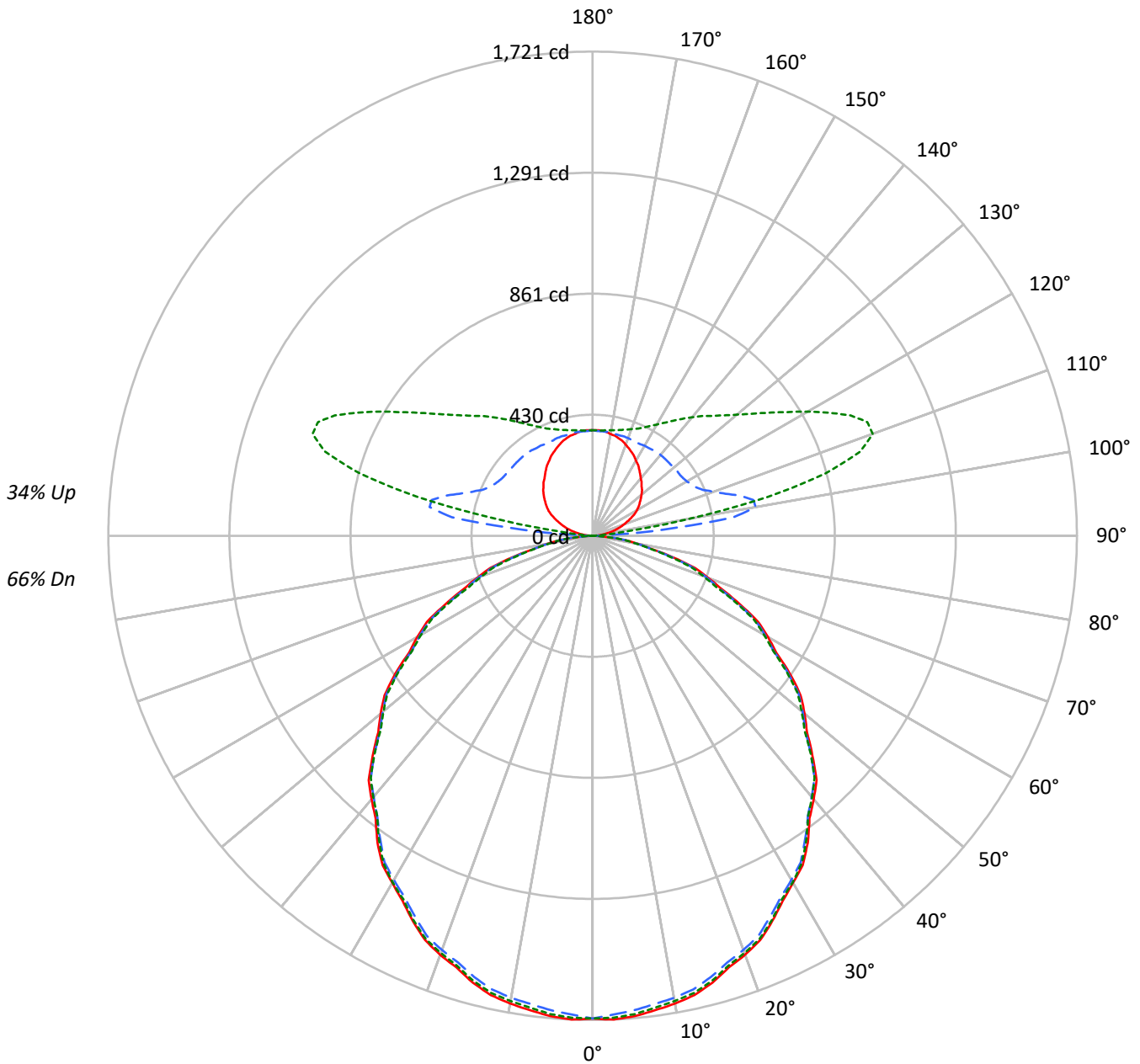
Lumens per Lamp: N/A  
Luminaire Lumens: 7120.9 lumens  
Efficiency: N/A  
Efficacy: 109.9 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35  
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')  
CIE Type: Semi-Direct

Input Watts (W): 64.8  
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									
RC	80									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	111	111	111	111	104	104	104	104	92	92	92	81	81	81	71	71	71	66																			
1	101	97	93	89	95	91	88	85	81	78	76	71	69	67	62	61	60	55																			
2	92	85	78	73	86	80	74	69	71	66	63	62	59	56	55	52	50	46																			
3	84	74	67	61	79	70	63	58	62	57	53	55	51	47	48	45	42	39																			
4	77	66	57	51	72	62	55	49	55	49	45	49	44	41	43	40	37	33																			
5	71	59	50	44	66	55	48	42	50	43	39	44	39	35	39	35	32	29																			
6	65	53	44	38	61	50	42	37	45	38	34	40	35	31	35	31	28	25																			
7	60	47	39	33	56	45	38	32	40	34	30	36	31	27	32	28	25	22																			
8	56	43	35	30	52	41	34	29	37	31	26	33	28	24	30	25	22	20																			
9	52	39	32	26	49	38	30	26	34	28	24	30	25	22	27	23	20	18																			
10	49	36	29	24	46	35	28	23	31	25	21	28	23	20	25	21	18	16																			

**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	2.3
10°-20°	461.1	6.5
20°-30°	692.5	9.7
30°-40°	826.7	11.6
40°-50°	847.1	11.9
50°-60°	755.5	10.6
60°-70°	562.6	7.9
70°-80°	305.4	4.3
80°-90°	71.6	1.0
90°-100°	149.4	2.1
100°-110°	519.9	7.3
110°-120°	503.6	7.1
120°-130°	395.1	5.5
130°-140°	312.7	4.4
140°-150°	241.3	3.4
150°-160°	173.0	2.4
160°-170°	105.8	1.5
170°-180°	35.8	0.5
0°-30°	1315.5	18.5
0°-40°	2142.1	30.1
0°-60°	3744.7	52.6
0°-90°	4684.4	65.8
90°-120°	1172.9	16.5
90°-150°	2122.0	29.8
90°-180°	2437.0	34.2
0°-180°	7120.9	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°	6	8	8	6	3	5
95°	25	87	252	64	39	27
105°	87	123	546	922	857	91
115°	151	182	406	857	1011	149
125°	205	252	378	639	762	183
135°	246	277	375	532	602	191
145°	289	308	373	460	499	181
155°	328	339	367	409	423	151
165°	359	362	370	387	390	101
175°	375	375	373	378	375	36
180°	375	375	375	375	375	



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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°	5.6	8.4	8.4	5.6	2.8
92.5°	14.1	42.1	39.2	16.8	14.1
95°	25.2	86.8	252.2	64.4	39.2
97.5°	39.2	98.1	504.3	229.8	123.3
100°	53.2	103.7	588.3	552.0	355.8
102.5°	70.1	112.0	585.6	776.1	638.8
105°	86.8	123.3	546.4	921.8	857.3



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	134.5	165.3	425.9	927.4	1056.3
115°	151.3	182.1	406.2	857.3	1011.4
117.5°	168.1	201.8	395.1	792.9	947.0
120°	182.1	218.5	386.7	731.3	882.5
122.5°	193.3	235.4	381.0	680.9	818.1
125°	204.6	252.2	378.2	638.8	762.1
127.5°	215.7	263.4	378.2	608.0	711.7
130°	227.0	269.0	375.4	577.2	669.6
132.5°	238.1	271.7	375.4	554.8	633.2
135°	246.5	277.3	375.4	532.3	602.4
137.5°	257.8	283.0	375.4	512.7	577.2
140°	266.2	291.4	375.4	493.1	549.2
142.5°	277.3	299.8	375.4	473.5	523.9
145°	288.6	308.2	372.6	459.5	498.7
147.5°	299.8	316.6	369.8	445.5	476.3
150°	308.2	325.0	369.8	431.4	456.7
152.5°	319.4	333.4	367.0	417.5	439.9
155°	327.8	339.0	367.0	409.0	423.1
157.5°	336.2	347.4	367.0	400.6	411.9
160°	344.6	353.0	369.8	395.1	403.4
162.5°	353.0	358.7	369.8	389.5	395.1
165°	358.7	361.5	369.8	386.7	389.5
167.5°	364.3	367.0	369.8	383.8	383.8
170°	367.0	369.8	372.6	381.0	381.0
172.5°	372.6	372.6	372.6	378.2	378.2
175°	375.4	375.4	372.6	378.2	375.4
177.5°	375.4	375.4	372.6	378.2	375.4
180°	375.4	375.4	375.4	375.4	375.4



Report Generated By 670246072 / DESKTOP-50001EG







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







107.5°	103.7	137.3	495.9	986.2	997.5
110°	117.6	151.3	456.7	977.8	1059.1



(END OF REPORT)