

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: P844950

Luminaire Tested: **SQ4P-F-100U-125D-B40-1D-UNV**

Issue Date: 8/14/2023

Test Information

Test Method: LM-79-08
Report Number: P844950
REPORT IS A COMBINATION OF REPORTS P700082 AND P700246
Test Lab: INNOVATION CENTER
Issue Date: 8/14/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4P-F-100U-125D-B40-1D-UNV
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, 1000 LUMENS PER FOOT
UPLIGHT, 1250 LUMENS PER FOOT DOWNLIGHT

Light Source: -
Ballast/Driver: -

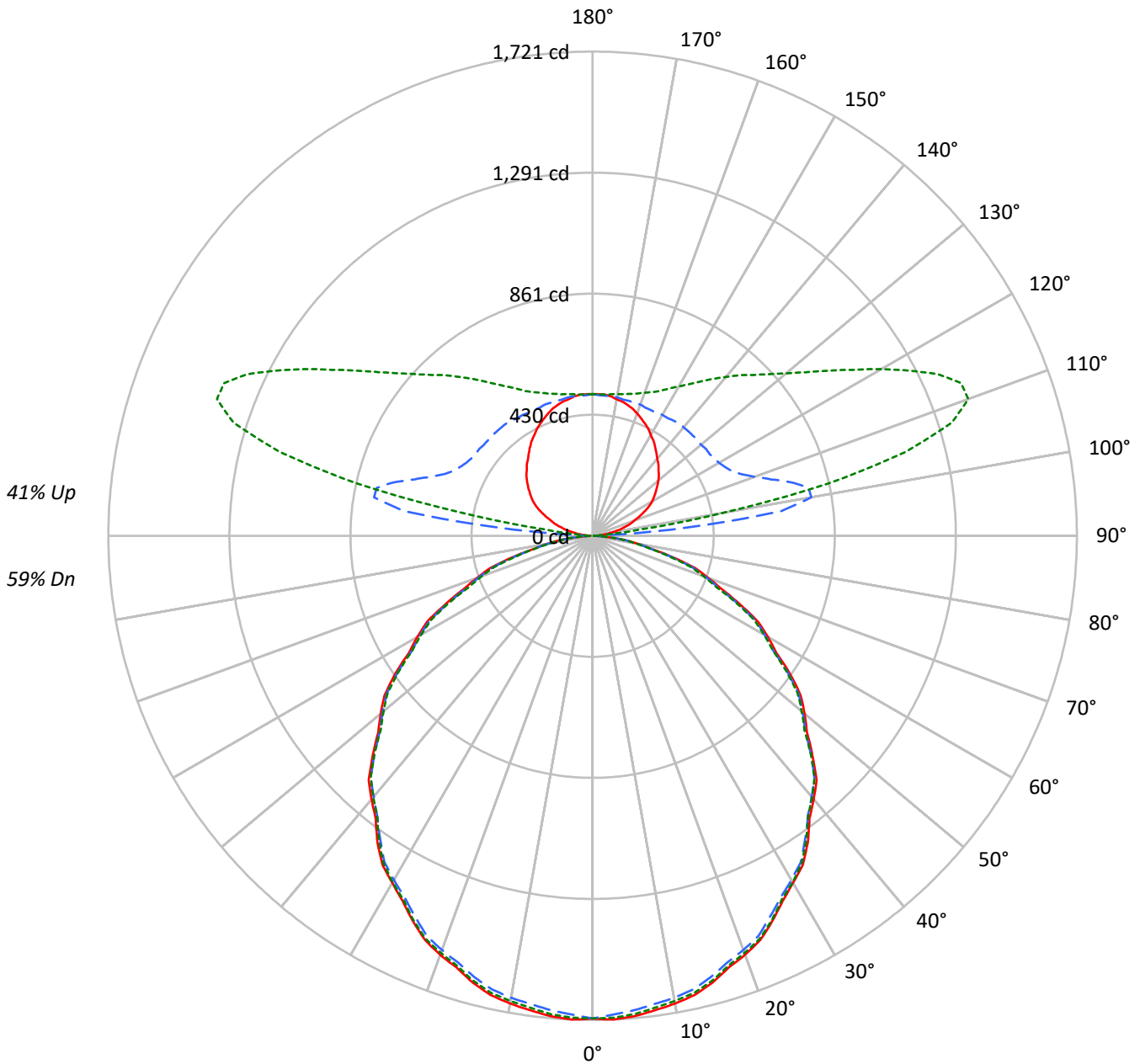
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7953.4 lumens
Efficiency: N/A
Efficacy: 110.8 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): 71.8
Input Voltage (V): NR
Input Current (A_{in}): 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	109	109	109	109	102	102	102	102	88	88	88	76	76	76	64	64	64	59																			
1	100	95	91	88	93	89	86	83	77	75	73	67	65	63	57	56	54	50																			
2	91	83	77	72	84	78	72	68	68	64	60	58	55	53	50	48	46	41																			
3	83	73	66	60	77	68	62	56	60	55	50	52	48	44	44	41	39	35																			
4	76	65	57	50	70	61	53	48	53	47	43	46	42	38	39	36	33	30																			
5	69	58	49	43	65	54	47	41	47	41	37	41	36	33	35	32	29	26																			
6	64	52	43	37	59	49	41	36	43	37	32	37	32	29	32	28	25	23																			
7	59	47	38	33	55	44	37	31	39	33	28	34	29	25	29	25	23	20																			
8	55	42	34	29	51	40	33	28	35	29	25	31	26	23	27	23	20	18																			
9	51	39	31	26	48	36	30	25	32	27	23	28	24	20	25	21	18	16																			
10	48	35	28	23	45	34	27	22	30	24	20	26	22	18	23	19	16	15																			

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	2.0
10°-20°	461.1	5.8
20°-30°	692.5	8.7
30°-40°	826.7	10.4
40°-50°	847.1	10.7
50°-60°	755.5	9.5
60°-70°	562.6	7.1
70°-80°	305.4	3.8
80°-90°	71.9	0.9
90°-100°	200.5	2.5
100°-110°	697.4	8.8
110°-120°	675.6	8.5
120°-130°	530.0	6.7
130°-140°	419.5	5.3
140°-150°	323.7	4.1
150°-160°	232.1	2.9
160°-170°	141.9	1.8
170°-180°	48.0	0.6
0°-30°	1315.5	16.5
0°-40°	2142.1	26.9
0°-60°	3744.7	47.1
0°-90°	4684.7	58.9
90°-120°	1573.5	19.8
90°-150°	2846.7	35.8
90°-180°	3269.0	41.1
0°-180°	7953.4	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°	8	11	11	8	4	6
95°	34	116	338	86	53	36
105°	116	165	733	1237	1150	122
115°	203	244	545	1150	1357	200
125°	274	338	507	857	1022	246
135°	331	372	504	714	808	256
145°	387	414	500	616	669	242
155°	440	455	492	549	568	203
165°	481	485	496	519	522	136
175°	504	504	500	507	504	48
180°	504	504	504	504	504	



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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°	7.6	11.2	11.2	7.6	3.8
92.5°	18.8	56.4	52.6	22.6	18.8
95°	33.8	116.5	338.3	86.4	52.6
97.5°	52.6	131.6	676.6	308.3	165.4
100°	71.4	139.1	789.3	740.5	477.4
102.5°	94.0	150.3	785.5	1041.2	856.9
105°	116.5	165.4	732.9	1236.6	1150.2



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	180.4	221.7	571.4	1244.1	1417.1
115°	202.9	244.3	545.0	1150.2	1356.9
117.5°	225.5	270.7	530.0	1063.7	1270.4
120°	244.3	293.1	518.7	981.0	1184.0
122.5°	259.3	315.7	511.2	913.3	1097.6
125°	274.3	338.3	507.4	856.9	1022.4
127.5°	289.5	353.3	507.4	815.7	954.7
130°	304.5	360.9	503.6	774.3	898.3
132.5°	319.5	364.6	503.6	744.2	849.5
135°	330.7	372.1	503.6	714.2	808.1
137.5°	345.8	379.6	503.6	687.8	774.3
140°	357.1	390.9	503.6	661.5	736.7
142.5°	372.1	402.2	503.6	635.2	702.9
145°	387.1	413.5	499.9	616.4	669.0
147.5°	402.2	424.7	496.2	597.6	639.0
150°	413.5	436.0	496.2	578.8	612.6
152.5°	428.5	447.3	492.4	560.0	590.2
155°	439.8	454.8	492.4	548.8	567.6
157.5°	451.0	466.1	492.4	537.5	552.6
160°	462.3	473.6	496.2	530.0	541.2
162.5°	473.6	481.1	496.2	522.4	530.0
165°	481.1	484.9	496.2	518.7	522.4
167.5°	488.6	492.4	496.2	515.0	515.0
170°	492.4	496.2	499.9	511.2	511.2
172.5°	499.9	499.9	499.9	507.4	507.4
175°	503.6	503.6	499.9	507.4	503.6
177.5°	503.6	503.6	499.9	507.4	503.6
180°	503.6	503.6	503.6	503.6	503.6



Report Generated By 670246072 / DESKTOP-50001EG





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







107.5°	139.1	184.2	665.3	1323.1	1338.1
110°	157.9	202.9	612.6	1311.8	1420.7



(END OF REPORT)