

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: P844960

Luminaire Tested: **SQ4P-F-125U-100D-B50-1D-UNV**

Issue Date: 8/14/2023

Test Information

Test Method: LM-79-08
Report Number: P844960
REPORT IS A COMBINATION OF REPORTS P700109 AND P700247
Test Lab: INNOVATION CENTER
Issue Date: 8/14/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4P-F-125U-100D-B50-1D-UNV
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, 1250 LUMENS PER FOOT UPLIGHT, 1000 LUMENS PER FOOT DOWNLIGHT

Light Source: -
Ballast/Driver: -

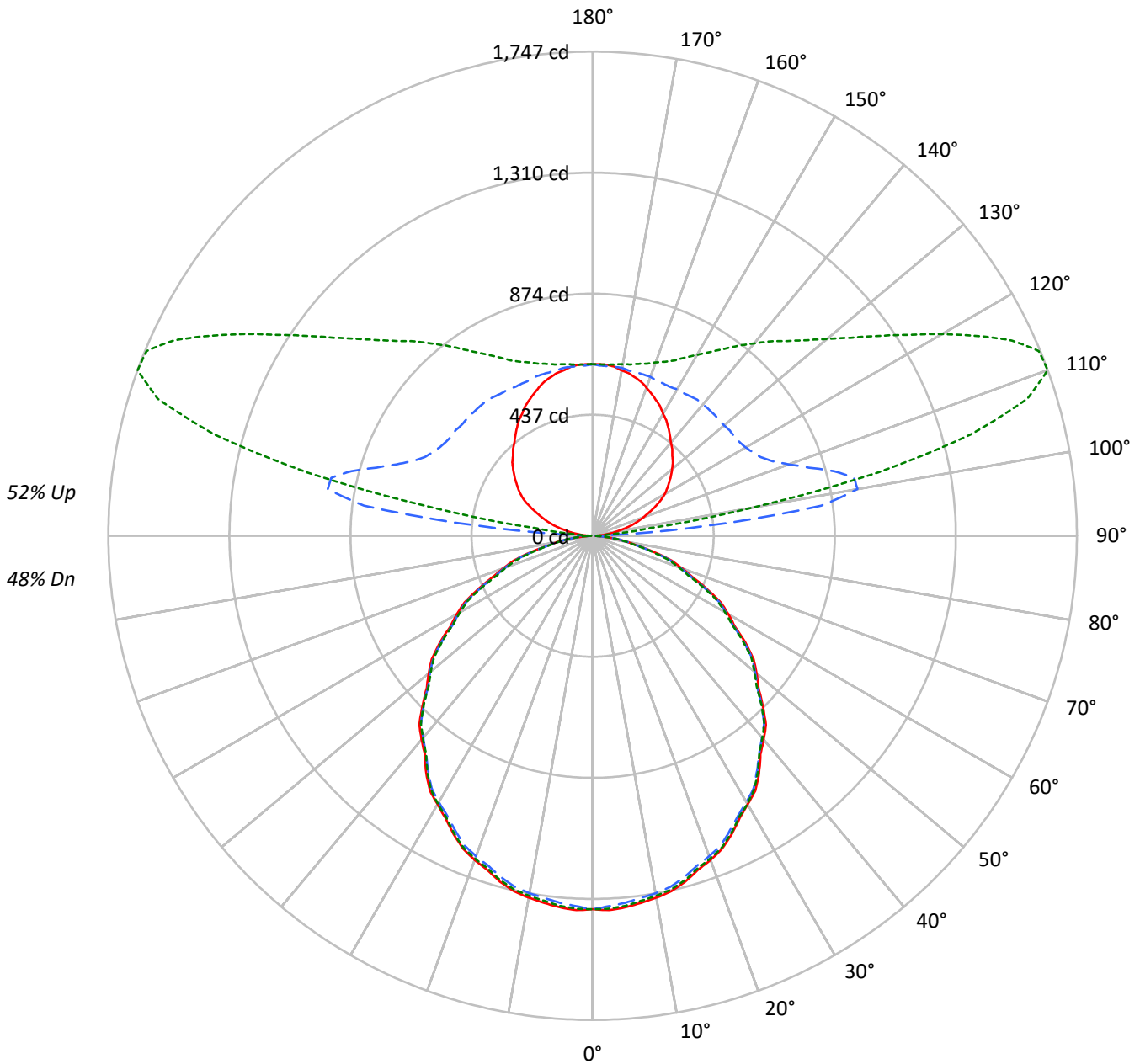
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7698.4 lumens
Efficiency: N/A
Efficacy: 111.7 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): 68.9
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	107	107	107	107	98	98	98	98	82	82	82	68	68	68	54	54	54	48				48															
1	97	93	89	86	89	86	82	79	72	70	67	59	58	56	48	47	46				40																
2	89	81	75	70	81	75	69	65	63	59	56	52	49	47	42	40	38				34																
3	81	71	64	58	74	66	59	54	55	51	47	46	42	39	37	35	33				28																
4	74	63	55	49	68	58	51	46	49	44	40	41	37	34	33	30	28				24																
5	68	56	48	42	62	52	45	39	44	38	34	37	32	29	30	27	24				21																
6	62	50	42	36	57	46	39	34	40	34	30	33	29	25	27	24	21				18																
7	58	45	37	32	53	42	35	30	36	30	26	30	26	22	25	21	19				16																
8	53	41	33	28	49	38	31	26	33	27	23	27	23	20	23	19	17				14																
9	50	37	30	25	46	35	28	23	30	24	21	25	21	18	21	18	15				13																
10	46	34	27	22	43	32	25	21	27	22	19	23	19	16	19	16	14				12																

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	12435	12435	12435
5°	12467	12317	12416
10°	12424	12272	12356
15°	12339	12183	12288
20°	12222	12081	12170
25°	12085	11939	12050
30°	11917	11821	11898
35°	11789	11646	11705
40°	11563	11451	11474
45°	11324	11230	11230
50°	11085	10980	10930
55°	10827	10681	10623
60°	10422	10256	10189
65°	9927	9728	9608
70°	9247	9050	8859
75°	8295	8038	7846
80°	6711	6626	6424
85°	3991	4594	4764



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	127.2	1.7
10°-20°	362.1	4.7
20°-30°	543.9	7.1
30°-40°	649.3	8.4
40°-50°	665.4	8.6
50°-60°	593.4	7.7
60°-70°	441.9	5.7
70°-80°	239.9	3.1
80°-90°	57.0	0.7
90°-100°	246.4	3.2
100°-110°	857.4	11.1
110°-120°	830.6	10.8
120°-130°	651.5	8.5
130°-140°	515.7	6.7
140°-150°	398.0	5.2
150°-160°	285.3	3.7
160°-170°	174.5	2.3
170°-180°	59.0	0.8
0°-30°	1033.2	13.4
0°-40°	1682.5	21.9
0°-60°	2941.3	38.2
0°-90°	3680.1	47.8
90°-120°	1934.4	25.1
90°-150°	3499.5	45.5
90°-180°	4018.0	52.2
0°-180°	7698.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1348	1348	1348	1348	1348	
5°	1346	1344	1330	1342	1341	128
15°	1292	1288	1276	1286	1286	364
25°	1187	1184	1173	1180	1184	547
35°	1047	1043	1034	1034	1039	653
45°	868	870	861	859	861	670
55°	673	673	664	659	660	600
65°	455	453	446	440	440	450
75°	233	231	226	222	220	246
85°	38	41	43	45	45	53
90°	9	14	14	9	5	7
95°	42	143	416	106	65	44
105°	143	203	901	1520	1414	151
115°	250	300	670	1414	1668	246
125°	337	416	624	1054	1257	302
135°	407	457	619	878	993	315
145°	476	508	614	758	822	298
155°	541	559	605	675	698	249
165°	592	596	610	638	642	167
175°	619	619	614	624	619	59
180°	619	619	619	619	619	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1347.8	1347.8	1347.8	1347.8	1347.8
2.5°	1352.0	1349.3	1337.7	1347.8	1346.5
5°	1346.1	1344.3	1329.9	1342.4	1340.6
7.5°	1336.2	1332.8	1318.6	1330.9	1329.0
10°	1326.1	1322.6	1309.9	1320.6	1318.9
12.5°	1313.2	1311.1	1297.0	1307.8	1307.3
15°	1291.8	1288.2	1275.5	1286.5	1286.5
17.5°	1263.8	1261.6	1249.2	1259.5	1258.5
20°	1244.8	1241.4	1230.5	1239.5	1239.5
22.5°	1221.8	1219.7	1209.0	1216.4	1217.8
25°	1187.1	1183.7	1172.8	1180.1	1183.7
27.5°	1149.0	1146.2	1137.2	1141.9	1144.3
30°	1118.6	1118.6	1109.6	1111.5	1116.8
32.5°	1091.3	1091.3	1080.7	1082.6	1085.2
35°	1046.7	1043.0	1034.0	1034.0	1039.2
37.5°	994.4	992.8	987.1	986.0	987.4
40°	960.1	958.2	950.8	952.7	952.7
42.5°	925.4	923.5	916.0	913.8	916.5
45°	867.9	869.8	860.7	858.8	860.7
47.5°	811.4	811.4	804.1	799.0	801.7
50°	772.3	772.3	765.0	761.5	761.5
52.5°	731.8	733.2	724.4	719.6	721.1
55°	673.1	673.1	664.0	658.7	660.4
57.5°	608.0	608.0	599.1	593.7	596.8
60°	564.8	564.8	555.8	550.3	552.2
62.5°	521.4	521.4	512.6	507.1	507.3
65°	454.7	453.0	445.6	440.1	440.1
67.5°	390.4	385.8	380.3	373.2	373.2
70°	342.8	340.9	335.5	328.4	328.4
72.5°	299.5	296.3	290.8	285.1	285.1
75°	232.7	230.8	225.5	222.0	220.1
77.5°	166.8	165.3	164.9	159.8	161.3
80°	126.3	126.3	124.7	120.9	120.9
82.5°	90.2	91.6	88.4	87.6	86.2
85°	37.7	41.3	43.4	45.0	45.0
87.5°	7.3	11.3	10.1	11.6	11.6
90°	9.2	13.9	13.9	9.2	4.7
92.5°	23.1	69.3	64.6	27.7	23.1
95°	41.6	143.3	415.8	106.2	64.6
97.5°	64.6	161.7	831.7	378.9	203.4
100°	87.8	171.0	970.3	910.2	586.8
102.5°	115.5	184.8	965.7	1279.9	1053.5
105°	143.3	203.4	901.0	1520.2	1413.9



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	221.8	272.7	702.3	1529.4	1742.0
115°	249.5	300.4	670.0	1413.9	1668.0
117.5°	277.2	332.7	651.5	1307.7	1561.8
120°	300.4	360.4	637.7	1206.0	1455.6
122.5°	318.8	388.1	628.4	1122.8	1349.2
125°	337.3	415.8	623.8	1053.5	1256.9
127.5°	355.8	434.3	623.8	1002.7	1173.7
130°	374.2	443.5	619.2	951.8	1104.3
132.5°	392.8	448.2	619.2	914.9	1044.3
135°	406.6	457.4	619.2	878.0	993.4
137.5°	425.1	466.7	619.2	845.6	951.8
140°	439.0	480.6	619.2	813.2	905.7
142.5°	457.4	494.4	619.2	780.9	864.1
145°	475.9	508.3	614.5	757.8	822.5
147.5°	494.4	522.1	610.0	734.7	785.5
150°	508.3	536.0	610.0	711.5	753.1
152.5°	526.8	549.9	605.3	688.5	725.4
155°	540.7	559.1	605.3	674.6	697.7
157.5°	554.5	572.9	605.3	660.8	679.3
160°	568.4	582.2	610.0	651.5	665.4
162.5°	582.2	591.5	610.0	642.2	651.5
165°	591.5	596.1	610.0	637.7	642.2
167.5°	600.7	605.3	610.0	633.0	633.0
170°	605.3	610.0	614.5	628.4	628.4
172.5°	614.5	614.5	614.5	623.8	623.8
175°	619.2	619.2	614.5	623.8	619.2
177.5°	619.2	619.2	614.5	623.8	619.2
180°	619.2	619.2	619.2	619.2	619.2



Report Generated By 670246072 / DESKTOP-50001EG





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







107.5°	171.0	226.4	817.9	1626.4	1645.0
110°	194.0	249.5	753.1	1612.6	1746.6



(END OF REPORT)