

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: P844948

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

Issue Date: 8/14/2023

Test Information

Test Method: LM-79-08
Report Number: P844948
REPORT IS A COMBINATION OF REPORTS P700081 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-100D-B50-1D-UNV
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, 1000 LUMENS PER FOOT UPLIGHT, 1000 LUMENS PER FOOT DOWNLIGHT

Light Source: -
Ballast/Driver: -

Summary

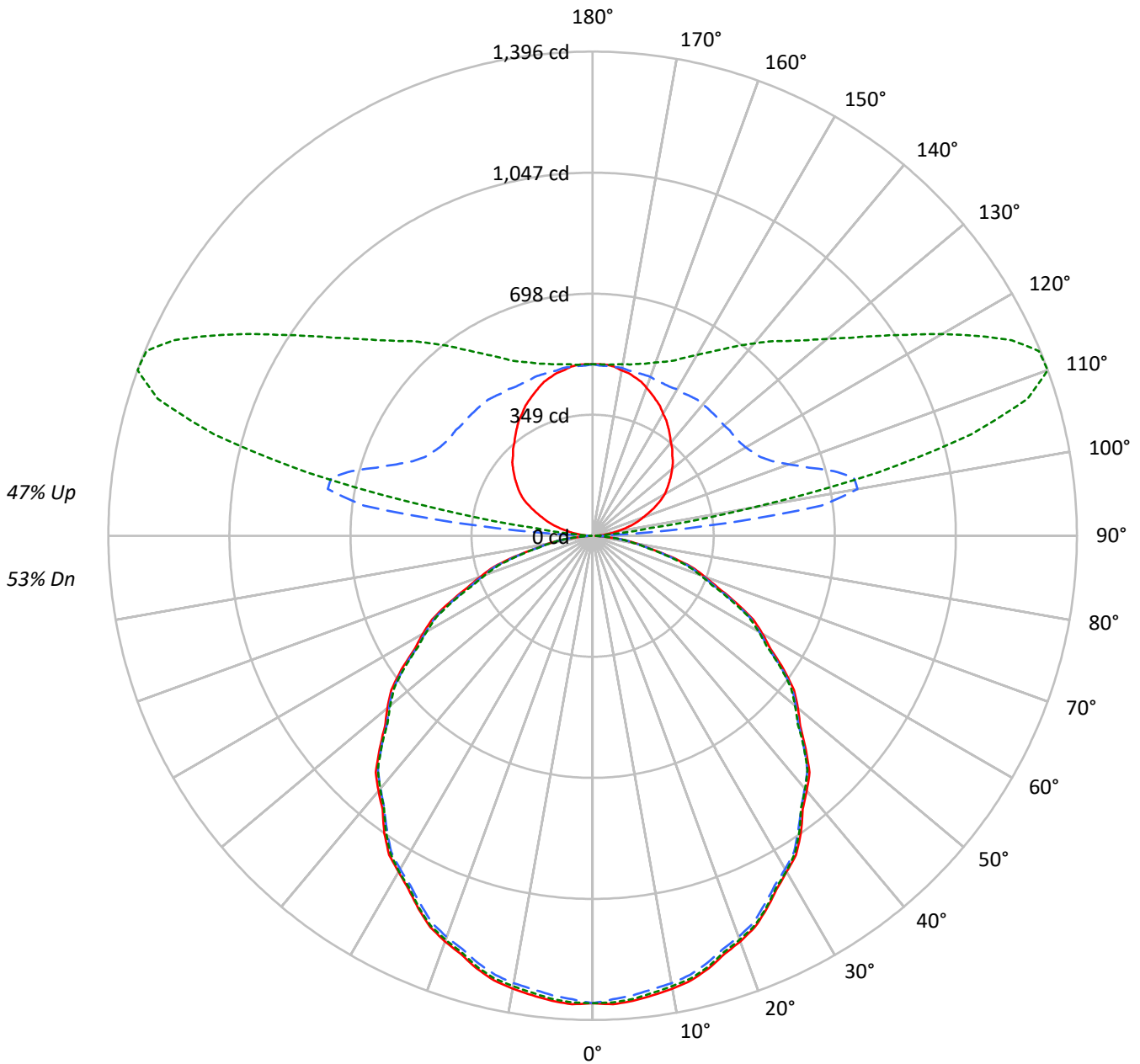
Lumens per Lamp: N/A
Luminaire Lumens: 6891.1 lumens
Efficiency: N/A
Efficacy: 113.2 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 60.9
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					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	50	30	10	50	30	10	0				
RCR																															
0	108	108	108	108	100	100	100	100	85	85	85	72	72	72	59	59	59	53													
1	99	94	90	87	91	87	84	81	75	72	70	63	61	60	52	51	50	45													
2	90	82	76	71	83	76	71	66	65	61	58	55	52	50	46	44	42	38													
3	82	72	65	59	75	67	61	55	58	53	49	49	45	42	41	38	36	32													
4	75	64	56	50	69	59	52	47	51	46	41	43	39	36	36	33	31	27													
5	69	57	49	42	63	53	46	40	46	40	36	39	34	31	33	29	27	23													
6	63	51	43	37	58	48	40	35	41	35	31	35	31	27	30	26	23	20													
7	58	46	38	32	54	43	36	31	37	31	27	32	27	24	27	23	21	18													
8	54	42	34	28	50	39	32	27	34	28	24	29	25	21	25	21	19	16													
9	50	38	30	25	47	36	29	24	31	26	22	27	22	19	23	19	17	15													
10	47	35	28	23	44	33	26	22	29	23	19	25	20	17	21	18	15	13													

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	1.8
10°-20°	362.1	5.3
20°-30°	543.9	7.9
30°-40°	649.3	9.4
40°-50°	665.4	9.7
50°-60°	593.4	8.6
60°-70°	441.9	6.4
70°-80°	239.9	3.5
80°-90°	56.7	0.8
90°-100°	196.9	2.9
100°-110°	685.2	9.9
110°-120°	663.7	9.6
120°-130°	520.7	7.6
130°-140°	412.1	6.0
140°-150°	318.0	4.6
150°-160°	228.0	3.3
160°-170°	139.4	2.0
170°-180°	47.2	0.7
0°-30°	1033.2	15.0
0°-40°	1682.5	24.4
0°-60°	2941.3	42.7
0°-90°	3679.8	53.4
90°-120°	1545.9	22.4
90°-150°	2796.7	40.6
90°-180°	3211.0	46.6
0°-180°	6891.1	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°	7	11	11	7	4	6
95°	33	114	332	85	52	35
105°	114	162	720	1215	1130	120
115°	199	240	535	1130	1333	197
125°	270	332	498	842	1004	241
135°	325	366	495	702	794	252
145°	380	406	491	606	657	238
155°	432	447	484	539	558	199
165°	473	476	487	510	513	133
175°	495	495	491	498	495	47
180°	495	495	495	495	495	



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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°	7.4	11.0	11.0	7.4	3.7
92.5°	18.5	55.4	51.7	22.2	18.5
95°	33.2	114.4	332.4	84.9	51.7
97.5°	51.7	129.3	664.7	302.8	162.5
100°	70.2	136.6	775.4	727.4	469.0
102.5°	92.3	147.7	771.7	1022.9	841.9
105°	114.4	162.5	720.0	1214.9	1130.0



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	177.3	217.8	561.3	1222.2	1392.1
115°	199.4	240.0	535.4	1130.0	1333.0
117.5°	221.5	265.9	520.7	1045.0	1248.1
120°	240.0	288.0	509.6	963.7	1163.2
122.5°	254.8	310.2	502.2	897.3	1078.3
125°	269.5	332.4	498.5	841.9	1004.4
127.5°	284.4	347.1	498.5	801.3	937.9
130°	299.1	354.5	494.8	760.7	882.5
132.5°	313.9	358.2	494.8	731.2	834.5
135°	324.9	365.6	494.8	701.6	793.9
137.5°	339.7	372.9	494.8	675.7	760.7
140°	350.8	384.0	494.8	649.9	723.7
142.5°	365.6	395.1	494.8	624.1	690.5
145°	380.3	406.2	491.1	605.6	657.3
147.5°	395.1	417.3	487.4	587.1	627.8
150°	406.2	428.3	487.4	568.6	601.9
152.5°	421.0	439.5	483.7	550.2	579.8
155°	432.0	446.8	483.7	539.1	557.6
157.5°	443.1	457.9	483.7	528.1	542.8
160°	454.2	465.3	487.4	520.7	531.7
162.5°	465.3	472.7	487.4	513.2	520.7
165°	472.7	476.4	487.4	509.6	513.2
167.5°	480.0	483.7	487.4	505.9	505.9
170°	483.7	487.4	491.1	502.2	502.2
172.5°	491.1	491.1	491.1	498.5	498.5
175°	494.8	494.8	491.1	498.5	494.8
177.5°	494.8	494.8	491.1	498.5	494.8
180°	494.8	494.8	494.8	494.8	494.8



Report Generated By 670246072 / DESKTOP-50001EG





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







107.5°	136.6	181.0	653.6	1299.8	1314.6
110°	155.1	199.4	601.9	1288.8	1395.8



(END OF REPORT)