

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: P844972

Luminaire Tested: **SQ4P-F-150U-100D-B50-1D-UNV**

Issue Date: 8/14/2023

Test Information

Test Method: LM-79-08
Report Number: P844972
REPORT IS A COMBINATION OF REPORTS P700137 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-100D-B50-1D-UNV
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, 1500 LUMENS PER FOOT
UPLIGHT, 1000 LUMENS PER FOOT DOWNLIGHT

Light Source: -
Ballast/Driver: -

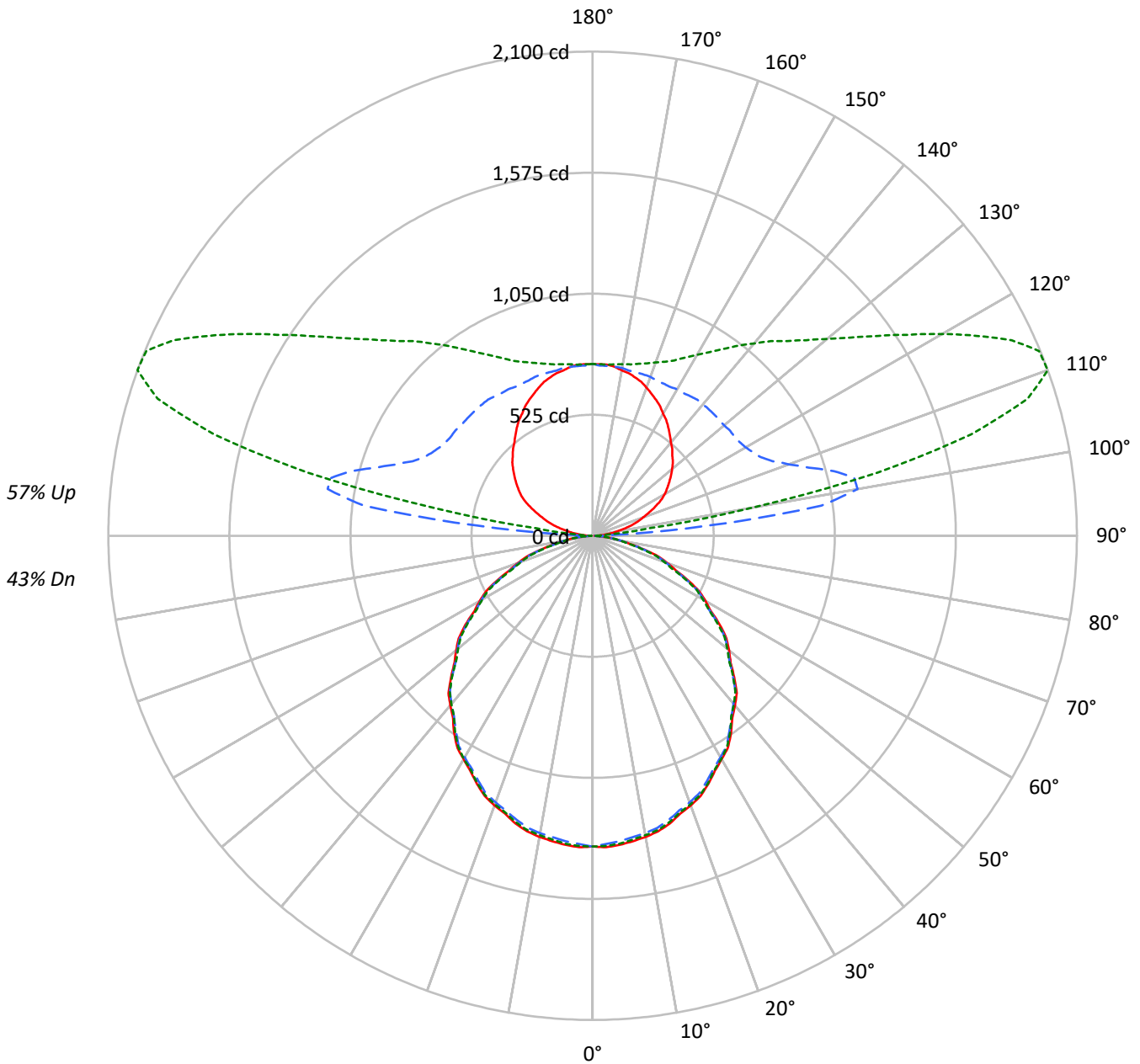
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8512.5 lumens
Efficiency: N/A
Efficacy: 109.3 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): 77.9
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	0					
RCR																										
0	106	106	106	106	96	96	96	96	80	80	80	64	64	64	50	50	50	43								
1	96	92	88	85	88	84	81	78	70	67	65	56	55	53	44	43	42	36								
2	88	80	74	69	80	74	68	64	61	57	54	49	47	44	39	37	35	30								
3	80	70	63	57	73	65	58	53	54	49	45	44	40	37	34	32	30	26								
4	73	62	54	48	66	57	50	45	48	42	38	39	35	32	31	28	26	22								
5	67	55	47	41	61	51	44	39	43	37	33	35	31	28	27	25	22	19								
6	62	50	41	36	56	46	39	33	38	33	29	31	27	24	25	22	20	17								
7	57	45	37	31	52	41	34	29	35	29	25	28	24	21	23	20	17	15								
8	53	40	33	27	48	37	31	26	31	26	22	26	22	19	21	18	16	13								
9	49	37	29	24	45	34	27	23	29	24	20	24	20	17	19	16	14	12								
10	46	34	27	22	42	31	25	20	26	21	18	22	18	15	18	15	13	11								

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	1.5
10°-20°	362.1	4.3
20°-30°	543.9	6.4
30°-40°	649.3	7.6
40°-50°	665.4	7.8
50°-60°	593.4	7.0
60°-70°	441.9	5.2
70°-80°	239.9	2.8
80°-90°	57.3	0.7
90°-100°	296.3	3.5
100°-110°	1031.0	12.1
110°-120°	998.8	11.7
120°-130°	783.5	9.2
130°-140°	620.1	7.3
140°-150°	478.6	5.6
150°-160°	343.1	4.0
160°-170°	209.8	2.5
170°-180°	71.0	0.8
0°-30°	1033.2	12.1
0°-40°	1682.5	19.8
0°-60°	2941.3	34.6
0°-90°	3680.4	43.2
90°-120°	2326.1	27.3
90°-150°	4208.3	49.4
90°-180°	4832.0	56.8
0°-180°	8512.5	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°	11	17	17	11	6	8
95°	50	172	500	128	78	53
105°	172	244	1084	1828	1700	181
115°	300	361	806	1700	2006	296
125°	406	500	750	1267	1511	363
135°	489	550	745	1056	1195	379
145°	572	611	739	911	989	358
155°	650	672	728	811	839	300
165°	711	717	733	767	772	201
175°	745	745	739	750	745	71
180°	745	745	745	745	745	



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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°	11.1	16.7	16.7	11.1	5.5
92.5°	27.8	83.3	77.8	33.3	27.8
95°	50.0	172.2	500.1	127.8	77.8
97.5°	77.8	194.5	1000.2	455.6	244.5
100°	105.6	205.5	1166.9	1094.6	705.6
102.5°	138.9	222.3	1161.3	1539.1	1266.9
105°	172.2	244.5	1083.5	1828.1	1700.3



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CATALOG NUMBER: SQ4P-F-150U-100D-B50-1D-UNV

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	266.7	327.9	844.5	1839.2	2094.7
115°	300.1	361.2	805.7	1700.3	2005.9
117.5°	333.4	400.0	783.4	1572.5	1878.1
120°	361.2	433.4	766.8	1450.2	1750.3
122.5°	383.4	466.8	755.7	1350.3	1622.4
125°	405.7	500.1	750.1	1266.9	1511.3
127.5°	427.8	522.3	750.1	1205.7	1411.4
130°	450.1	533.4	744.6	1144.6	1328.0
132.5°	472.3	538.9	744.6	1100.2	1255.7
135°	489.0	550.1	744.6	1055.7	1194.6
137.5°	511.2	561.2	744.6	1016.9	1144.6
140°	527.9	577.9	744.6	977.9	1089.0
142.5°	550.1	594.5	744.6	939.1	1039.0
145°	572.4	611.2	739.0	911.3	989.1
147.5°	594.5	627.9	733.4	883.5	944.6
150°	611.2	644.5	733.4	855.7	905.7
152.5°	633.5	661.2	727.9	827.9	872.3
155°	650.1	672.3	727.9	811.2	839.0
157.5°	666.8	689.0	727.9	794.6	816.8
160°	683.5	700.1	733.4	783.4	800.1
162.5°	700.1	711.3	733.4	772.4	783.4
165°	711.3	716.8	733.4	766.8	772.4
167.5°	722.3	727.9	733.4	761.2	761.2
170°	727.9	733.4	739.0	755.7	755.7
172.5°	739.0	739.0	739.0	750.1	750.1
175°	744.6	744.6	739.0	750.1	744.6
177.5°	744.6	744.6	739.0	750.1	744.6
180°	744.6	744.6	744.6	744.6	744.6



Report Generated By 670246072 / DESKTOP-50001EG





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







107.5°	205.5	272.3	983.5	1955.8	1978.1
110°	233.3	300.1	905.7	1939.2	2100.4



(END OF REPORT)