

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: P844958

Luminaire Tested: **SQ4P-F-125U-100D-B35-1D-UNV**

Issue Date: 8/14/2023

**Test Information**

Test Method: LM-79-08  
Report Number: P844958  
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-B35-1D-UNV  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, 1250 LUMENS PER FOOT  
UPLIGHT, 1000 LUMENS PER FOOT DOWNLIGHT  
  
Light Source: -  
Ballast/Driver: -

**Summary**

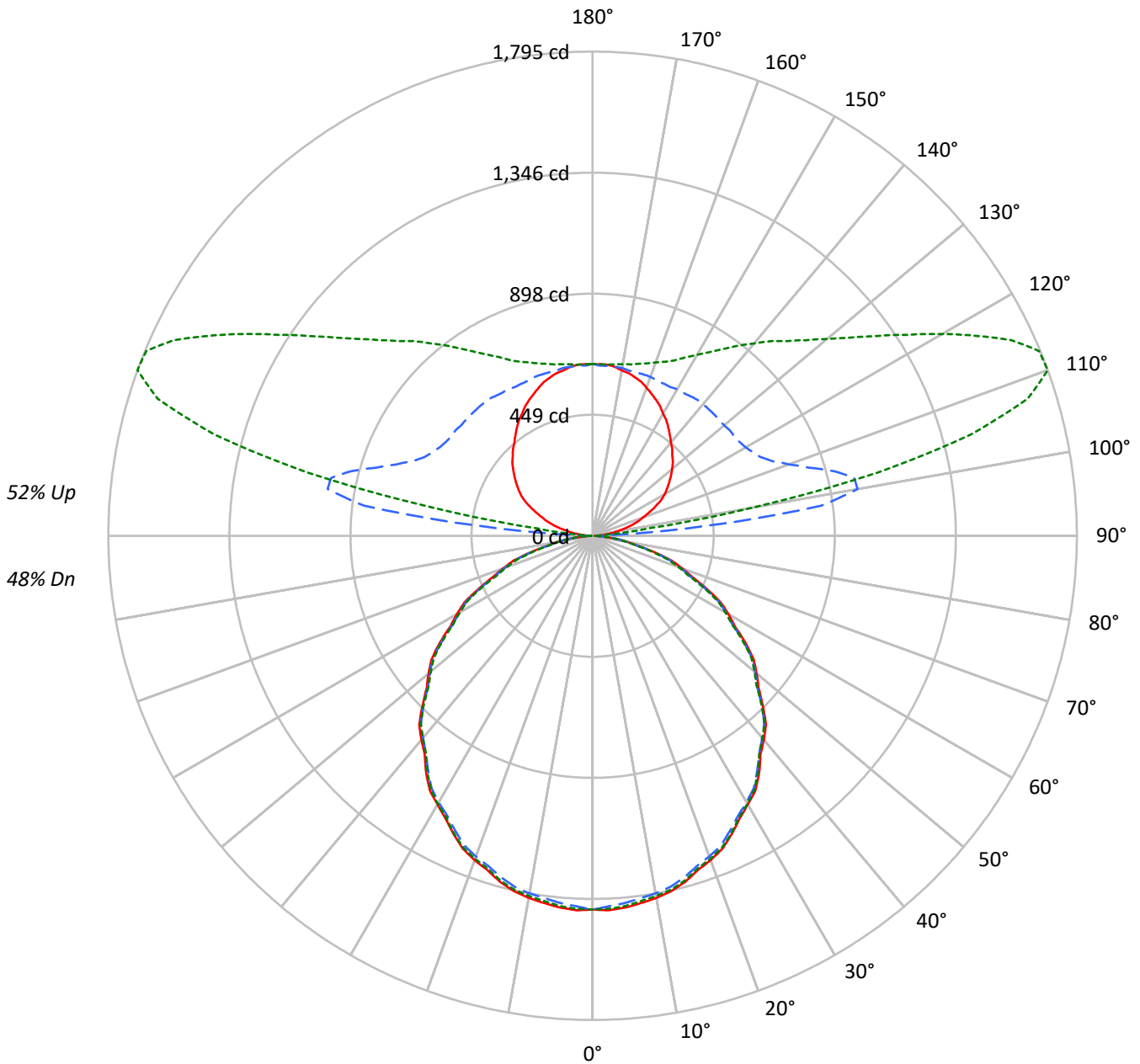
Lumens per Lamp: N/A  
Luminaire Lumens: 7913.2 lumens  
Efficiency: N/A  
Efficacy: 114.8 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35  
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')  
CIE Type: General Diffuse

Input Watts (W): 68.9  
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	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°	12782	12782	12782
5°	12814	12660	12762
10°	12769	12614	12701
15°	12683	12523	12630
20°	12563	12418	12510
25°	12422	12272	12386
30°	12249	12150	12230
35°	12117	11970	12031
40°	11886	11771	11795
45°	11640	11543	11543
50°	11394	11288	11236
55°	11128	10978	10919
60°	10713	10542	10474
65°	10204	10001	9876
70°	9506	9301	9104
75°	8527	8263	8063
80°	6902	6811	6604
85°	4107	4721	4901



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	130.7	1.7
10°-20°	372.2	4.7
20°-30°	559.1	7.1
30°-40°	667.4	8.4
40°-50°	683.9	8.6
50°-60°	609.9	7.7
60°-70°	454.2	5.7
70°-80°	246.6	3.1
80°-90°	58.6	0.7
90°-100°	253.3	3.2
100°-110°	881.3	11.1
110°-120°	853.7	10.8
120°-130°	669.7	8.5
130°-140°	530.1	6.7
140°-150°	409.1	5.2
150°-160°	293.2	3.7
160°-170°	179.4	2.3
170°-180°	60.7	0.8
0°-30°	1062.0	13.4
0°-40°	1729.4	21.9
0°-60°	3023.3	38.2
0°-90°	3782.7	47.8
90°-120°	1988.3	25.1
90°-150°	3597.1	45.5
90°-180°	4130.0	52.2
0°-180°	7913.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1385	1385	1385	1385	1385	
5°	1384	1382	1367	1380	1378	131
15°	1328	1324	1311	1322	1322	374
25°	1220	1217	1206	1213	1217	562
35°	1076	1072	1063	1063	1068	671
45°	892	894	885	883	885	689
55°	692	692	682	677	679	616
65°	467	466	458	452	452	463
75°	239	237	232	228	226	253
85°	39	42	45	46	46	54
90°	10	14	14	10	5	7
95°	43	147	427	109	66	45
105°	147	209	926	1563	1453	155
115°	256	309	689	1453	1714	253
125°	347	427	641	1083	1292	310
135°	418	470	636	902	1021	324
145°	489	522	632	779	845	306
155°	556	575	622	693	717	256
165°	608	613	627	655	660	171
175°	636	636	632	641	636	60
180°	636	636	636	636	636	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1385.4	1385.4	1385.4	1385.4	1385.4
2.5°	1389.7	1386.9	1375.0	1385.4	1384.1
5°	1383.6	1381.7	1367.0	1379.8	1378.0
7.5°	1373.4	1370.0	1355.3	1368.0	1366.1
10°	1363.0	1359.4	1346.4	1357.5	1355.7
12.5°	1349.8	1347.7	1333.2	1344.3	1343.8
15°	1327.8	1324.1	1311.1	1322.3	1322.3
17.5°	1299.0	1296.8	1284.1	1294.6	1293.6
20°	1279.5	1276.1	1264.8	1274.1	1274.1
22.5°	1255.9	1253.7	1242.7	1250.3	1251.8
25°	1220.2	1216.7	1205.5	1213.0	1216.7
27.5°	1181.0	1178.2	1168.9	1173.7	1176.2
30°	1149.8	1149.8	1140.5	1142.5	1148.0
32.5°	1121.7	1121.7	1110.9	1112.8	1115.5
35°	1075.8	1072.1	1062.8	1062.8	1068.2
37.5°	1022.1	1020.4	1014.6	1013.5	1015.0
40°	986.9	984.9	977.3	979.3	979.3
42.5°	951.2	949.2	941.6	939.2	942.1
45°	892.1	894.0	884.7	882.8	884.7
47.5°	834.0	834.0	826.5	821.3	824.1
50°	793.8	793.8	786.4	782.8	782.8
52.5°	752.2	753.7	744.6	739.7	741.2
55°	691.8	691.8	682.5	677.1	678.8
57.5°	624.9	624.9	615.8	610.2	613.5
60°	580.6	580.6	571.3	565.6	567.6
62.5°	536.0	536.0	526.9	521.3	521.5
65°	467.4	465.6	458.1	452.4	452.4
67.5°	401.3	396.5	390.9	383.6	383.6
70°	352.4	350.4	344.8	337.5	337.5
72.5°	307.9	304.5	299.0	293.1	293.1
75°	239.2	237.2	231.8	228.2	226.2
77.5°	171.4	169.9	169.5	164.3	165.8
80°	129.9	129.9	128.2	124.3	124.3
82.5°	92.7	94.1	90.9	90.0	88.6
85°	38.8	42.5	44.6	46.3	46.3
87.5°	7.5	11.6	10.4	11.9	11.9
90°	9.5	14.3	14.3	9.5	4.8
92.5°	23.8	71.2	66.4	28.5	23.8
95°	42.8	147.3	427.4	109.2	66.4
97.5°	66.4	166.3	854.9	389.5	209.0
100°	90.2	175.8	997.4	935.6	603.2
102.5°	118.7	189.9	992.7	1315.6	1082.9
105°	147.3	209.0	926.1	1562.6	1453.4



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	228.0	280.3	721.9	1572.1	1790.6
115°	256.5	308.7	688.7	1453.4	1714.5
117.5°	285.0	342.0	669.6	1344.2	1605.3
120°	308.7	370.5	655.4	1239.6	1496.1
122.5°	327.7	399.0	646.0	1154.1	1386.8
125°	346.7	427.4	641.2	1082.9	1291.9
127.5°	365.7	446.4	641.2	1030.6	1206.4
130°	384.7	455.9	636.5	978.4	1135.1
132.5°	403.8	460.7	636.5	940.4	1073.4
135°	417.9	470.2	636.5	902.4	1021.1
137.5°	436.9	479.7	636.5	869.2	978.4
140°	451.2	494.0	636.5	835.9	930.9
142.5°	470.2	508.2	636.5	802.6	888.1
145°	489.2	522.5	631.7	778.9	845.4
147.5°	508.2	536.6	627.0	755.2	807.4
150°	522.5	550.9	627.0	731.4	774.1
152.5°	541.4	565.2	622.2	707.7	745.7
155°	555.7	574.7	622.2	693.4	717.2
157.5°	569.9	588.9	622.2	679.2	698.2
160°	584.2	598.4	627.0	669.6	683.9
162.5°	598.4	608.0	627.0	660.1	669.6
165°	608.0	612.7	627.0	655.4	660.1
167.5°	617.5	622.2	627.0	650.6	650.6
170°	622.2	627.0	631.7	646.0	646.0
172.5°	631.7	631.7	631.7	641.2	641.2
175°	636.5	636.5	631.7	641.2	636.5
177.5°	636.5	636.5	631.7	641.2	636.5
180°	636.5	636.5	636.5	636.5	636.5



Report Generated By 670246072 / DESKTOP-50001EG







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







107.5°	175.8	232.7	840.7	1671.8	1690.9
110°	199.4	256.5	774.1	1657.6	1795.3



(END OF REPORT)