

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: P844946

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

Issue Date: 8/14/2023



**Test Information**

Test Method: LM-79-08  
Report Number: P844946  
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-B35-1D-UNV  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, 1000 LUMENS PER FOOT UPLIGHT, 1000 LUMENS PER FOOT DOWNLIGHT  
  
Light Source: -  
Ballast/Driver: -

**Summary**

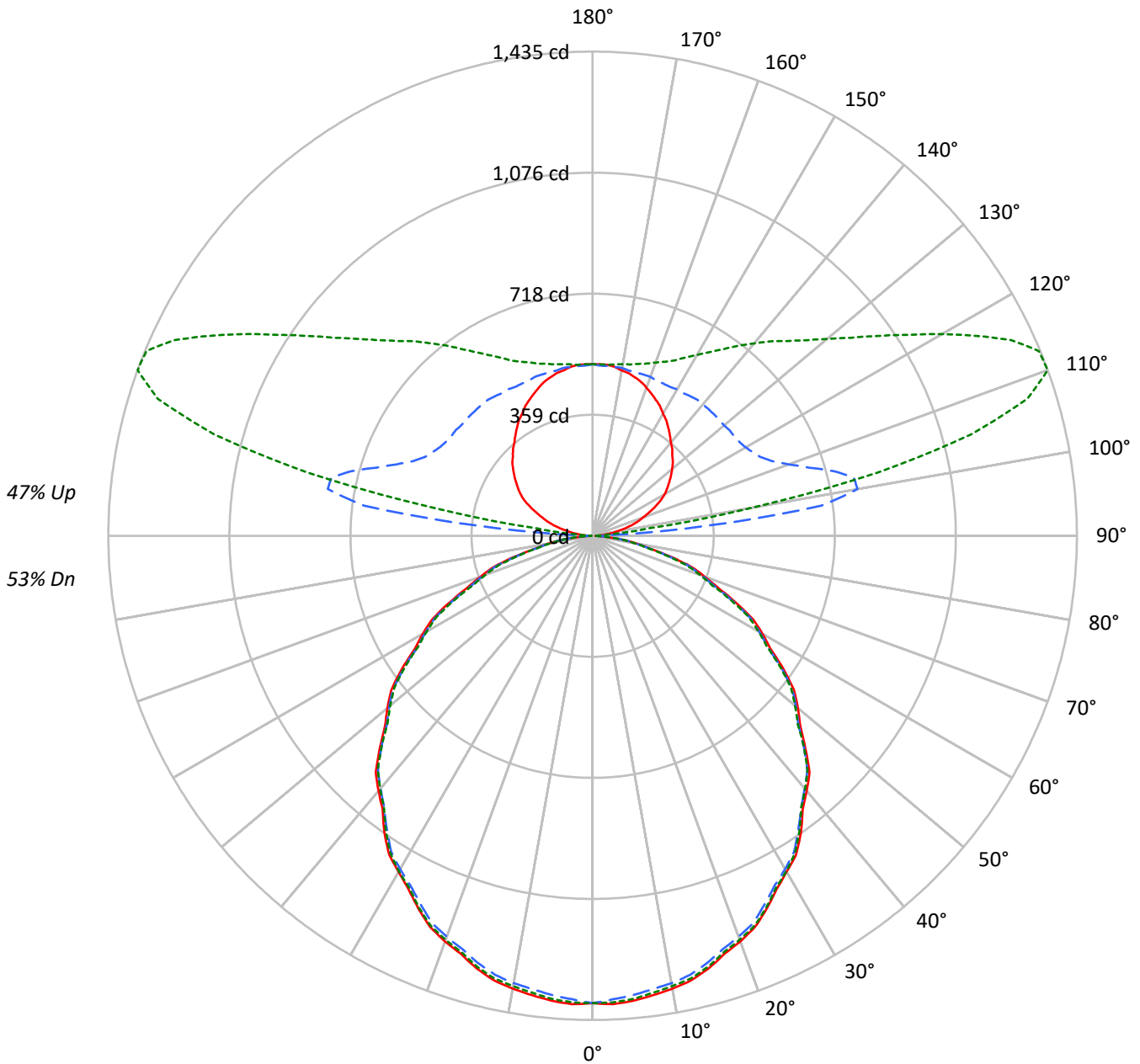
Lumens per Lamp: N/A  
Luminaire Lumens: 7083.2 lumens  
Efficiency: N/A  
Efficacy: 116.3 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35  
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')  
CIE Type: General Diffuse

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

**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	1.8
10°-20°	372.2	5.3
20°-30°	559.1	7.9
30°-40°	667.4	9.4
40°-50°	683.9	9.7
50°-60°	609.9	8.6
60°-70°	454.2	6.4
70°-80°	246.6	3.5
80°-90°	58.3	0.8
90°-100°	202.4	2.9
100°-110°	704.3	9.9
110°-120°	682.2	9.6
120°-130°	535.2	7.6
130°-140°	423.6	6.0
140°-150°	326.9	4.6
150°-160°	234.3	3.3
160°-170°	143.3	2.0
170°-180°	48.5	0.7
0°-30°	1062.0	15.0
0°-40°	1729.4	24.4
0°-60°	3023.3	42.7
0°-90°	3782.4	53.4
90°-120°	1588.9	22.4
90°-150°	2874.6	40.6
90°-180°	3301.0	46.6
0°-180°	7083.2	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°	8	11	11	8	4	6
95°	34	118	342	87	53	36
105°	118	167	740	1249	1162	124
115°	205	247	550	1162	1370	202
125°	277	342	512	865	1032	248
135°	334	376	509	721	816	259
145°	391	418	505	622	676	245
155°	444	459	497	554	573	205
165°	486	490	501	524	528	137
175°	509	509	505	512	509	48
180°	509	509	509	509	509	



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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°	7.6	11.4	11.4	7.6	3.8
92.5°	19.0	57.0	53.1	22.8	19.0
95°	34.2	117.6	341.6	87.3	53.1
97.5°	53.1	132.9	683.2	311.3	167.0
100°	72.1	140.4	797.0	747.7	482.0
102.5°	94.9	151.8	793.2	1051.4	865.3
105°	117.6	167.0	740.1	1248.7	1161.5



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	182.2	223.9	577.0	1256.3	1431.0
115°	204.9	246.7	550.3	1161.5	1370.2
117.5°	227.7	273.3	535.2	1074.2	1282.9
120°	246.7	296.0	523.8	990.6	1195.6
122.5°	261.9	318.8	516.2	922.3	1108.3
125°	277.0	341.6	512.4	865.3	1032.4
127.5°	292.3	356.8	512.4	823.7	964.1
130°	307.5	364.4	508.6	781.9	907.1
132.5°	322.6	368.1	508.6	751.5	857.8
135°	334.0	375.8	508.6	721.2	816.0
137.5°	349.2	383.3	508.6	694.6	781.9
140°	360.6	394.8	508.6	668.0	743.9
142.5°	375.8	406.1	508.6	641.5	709.8
145°	390.9	417.6	504.8	622.5	675.6
147.5°	406.1	428.9	501.0	603.5	645.3
150°	417.6	440.3	501.0	584.5	618.6
152.5°	432.7	451.7	497.2	565.5	595.9
155°	444.1	459.2	497.2	554.2	573.1
157.5°	455.4	470.7	497.2	542.8	558.0
160°	466.9	478.2	501.0	535.2	546.5
162.5°	478.2	485.9	501.0	527.5	535.2
165°	485.9	489.7	501.0	523.8	527.5
167.5°	493.4	497.2	501.0	520.0	520.0
170°	497.2	501.0	504.8	516.2	516.2
172.5°	504.8	504.8	504.8	512.4	512.4
175°	508.6	508.6	504.8	512.4	508.6
177.5°	508.6	508.6	504.8	512.4	508.6
180°	508.6	508.6	508.6	508.6	508.6



Report Generated By 670246072 / DESKTOP-50001EG







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







107.5°	140.4	186.0	671.8	1336.0	1351.2
110°	159.4	204.9	618.6	1324.7	1434.7



(END OF REPORT)