

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: P844910

Luminaire Tested: **SQ4P-F-050U-100D-B35-1D-UNV**

Issue Date: 8/14/2023

**Test Information**

Test Method: LM-79-08  
Report Number: P844910  
REPORT IS A COMBINATION OF REPORTS P700193 AND P700244  
Test Lab: INNOVATION CENTER  
Issue Date: 8/14/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: SQ4P-F-050U-100D-B35-1D-UNV  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, 500 LUMENS PER FOOT  
UPLIGHT, 1000 LUMENS PER FOOT DOWNLIGHT  
  
Light Source: -  
Ballast/Driver: -

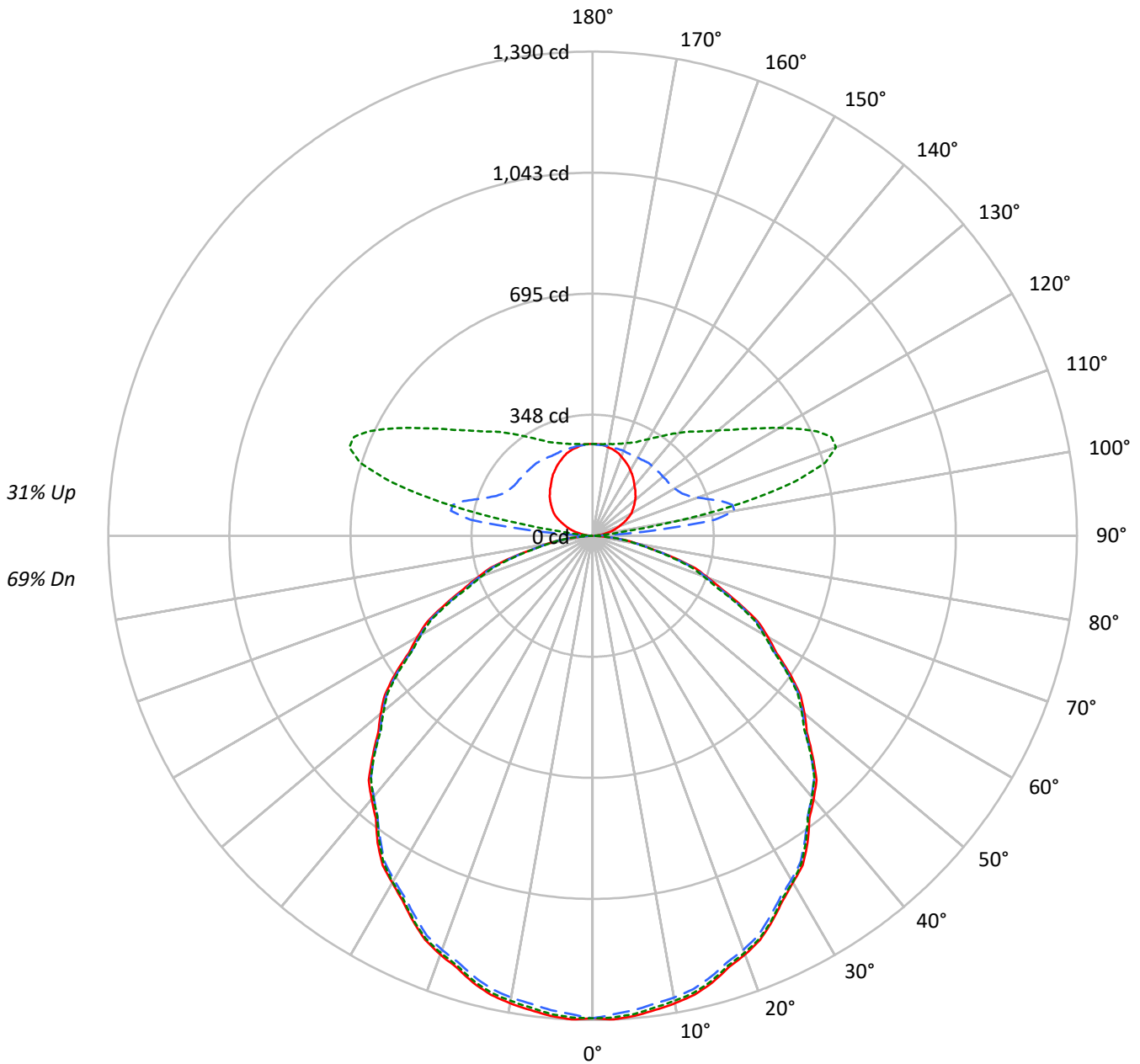
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5492.0 lumens  
Efficiency: N/A  
Efficacy: 114.7 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: Semi-Direct

Input Watts (W): 47.9  
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	112	112	112	112	105	105	105	105	94	94	94	83	83	83	73	73	73	69																			
1	102	98	94	90	96	92	89	86	82	80	77	73	71	69	65	63	62	58																			
2	93	85	79	73	87	81	75	70	72	68	64	64	61	58	57	54	52	48																			
3	85	75	67	61	80	71	64	58	63	58	54	57	52	49	50	47	44	41																			
4	77	66	58	52	73	63	55	50	56	50	46	50	46	42	45	41	38	35																			
5	71	59	50	44	67	56	48	43	50	44	39	45	40	36	40	36	33	30																			
6	66	53	44	38	62	50	43	37	45	39	34	41	36	32	37	32	29	26																			
7	61	48	40	34	57	46	38	33	41	35	30	37	32	28	33	29	26	23																			
8	56	44	35	30	53	42	34	29	38	31	27	34	29	25	31	26	23	21																			
9	53	40	32	27	50	38	31	26	35	28	24	31	26	22	28	24	21	19																			
10	49	37	29	24	46	35	28	23	32	26	22	29	24	20	26	22	19	17																			

**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	2.4
10°-20°	372.2	6.8
20°-30°	559.1	10.2
30°-40°	667.4	12.2
40°-50°	683.9	12.5
50°-60°	609.9	11.1
60°-70°	454.2	8.3
70°-80°	246.6	4.5
80°-90°	57.7	1.1
90°-100°	104.9	1.9
100°-110°	364.9	6.6
110°-120°	353.5	6.4
120°-130°	277.3	5.0
130°-140°	219.5	4.0
140°-150°	169.4	3.1
150°-160°	121.4	2.2
160°-170°	74.3	1.4
170°-180°	25.1	0.5
0°-30°	1062.0	19.3
0°-40°	1729.4	31.5
0°-60°	3023.3	55.0
0°-90°	3781.8	68.9
90°-120°	823.3	15.0
90°-150°	1489.4	27.1
90°-180°	1710.0	31.1
0°-180°	5492.0	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°	4	6	6	4	2	3
95°	18	61	177	45	28	19
105°	61	86	384	647	602	64
115°	106	128	285	602	710	105
125°	144	177	266	448	535	129
135°	173	195	264	374	423	134
145°	203	216	262	322	350	127
155°	230	238	258	287	297	106
165°	252	254	260	271	273	71
175°	264	264	262	266	264	25
180°	264	264	264	264	264	



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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°	3.9	5.9	5.9	3.9	2.0
92.5°	9.8	29.5	27.5	11.8	9.8
95°	17.7	61.0	177.0	45.2	27.5
97.5°	27.5	68.8	353.9	161.3	86.5
100°	37.4	72.8	413.0	387.4	249.7
102.5°	49.1	78.7	411.0	544.7	448.4
105°	61.0	86.5	383.5	646.9	601.7



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	94.4	116.1	299.0	650.9	741.4
115°	106.2	127.8	285.2	601.7	709.9
117.5°	118.0	141.6	277.2	556.5	664.6
120°	127.8	153.3	271.4	513.3	619.4
122.5°	135.7	165.2	267.4	477.8	574.2
125°	143.6	177.0	265.5	448.4	534.9
127.5°	151.4	184.9	265.5	426.8	499.5
130°	159.3	188.8	263.5	405.1	470.0
132.5°	167.1	190.7	263.5	389.4	444.5
135°	173.0	194.6	263.5	373.6	422.8
137.5°	180.9	198.6	263.5	359.8	405.1
140°	186.8	204.5	263.5	346.1	385.5
142.5°	194.6	210.4	263.5	332.3	367.7
145°	202.6	216.4	261.6	322.5	350.0
147.5°	210.4	222.2	259.6	312.7	334.3
150°	216.4	228.1	259.6	302.9	320.6
152.5°	224.2	234.0	257.7	293.0	308.7
155°	230.1	238.0	257.7	287.1	296.9
157.5°	235.9	243.9	257.7	281.2	289.1
160°	241.9	247.8	259.6	277.2	283.2
162.5°	247.8	251.7	259.6	273.3	277.2
165°	251.7	253.6	259.6	271.4	273.3
167.5°	255.6	257.7	259.6	269.4	269.4
170°	257.7	259.6	261.6	267.4	267.4
172.5°	261.6	261.6	261.6	265.5	265.5
175°	263.5	263.5	261.6	265.5	263.5
177.5°	263.5	263.5	261.6	265.5	263.5
180°	263.5	263.5	263.5	263.5	263.5



Report Generated By 670246072 / DESKTOP-50001EG







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







107.5°	72.8	96.4	348.1	692.2	700.1
110°	82.6	106.2	320.6	686.3	743.3



(END OF REPORT)