

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: P844899

Luminaire Tested: **SQ4P-F-025U-100D-B40-1D-UNV**

Issue Date: 8/14/2023



**Test Information**

Test Method: LM-79-08  
Report Number: P844899  
REPORT IS A COMBINATION OF REPORTS P700165 AND P700243  
Test Lab: INNOVATION CENTER  
Issue Date: 8/14/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: SQ4P-F-025U-100D-B40-1D-UNV  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, 250 LUMENS PER FOOT UPLIGHT, 1000 LUMENS PER FOOT DOWNLIGHT  
  
Light Source: -  
Ballast/Driver: -

**Summary**

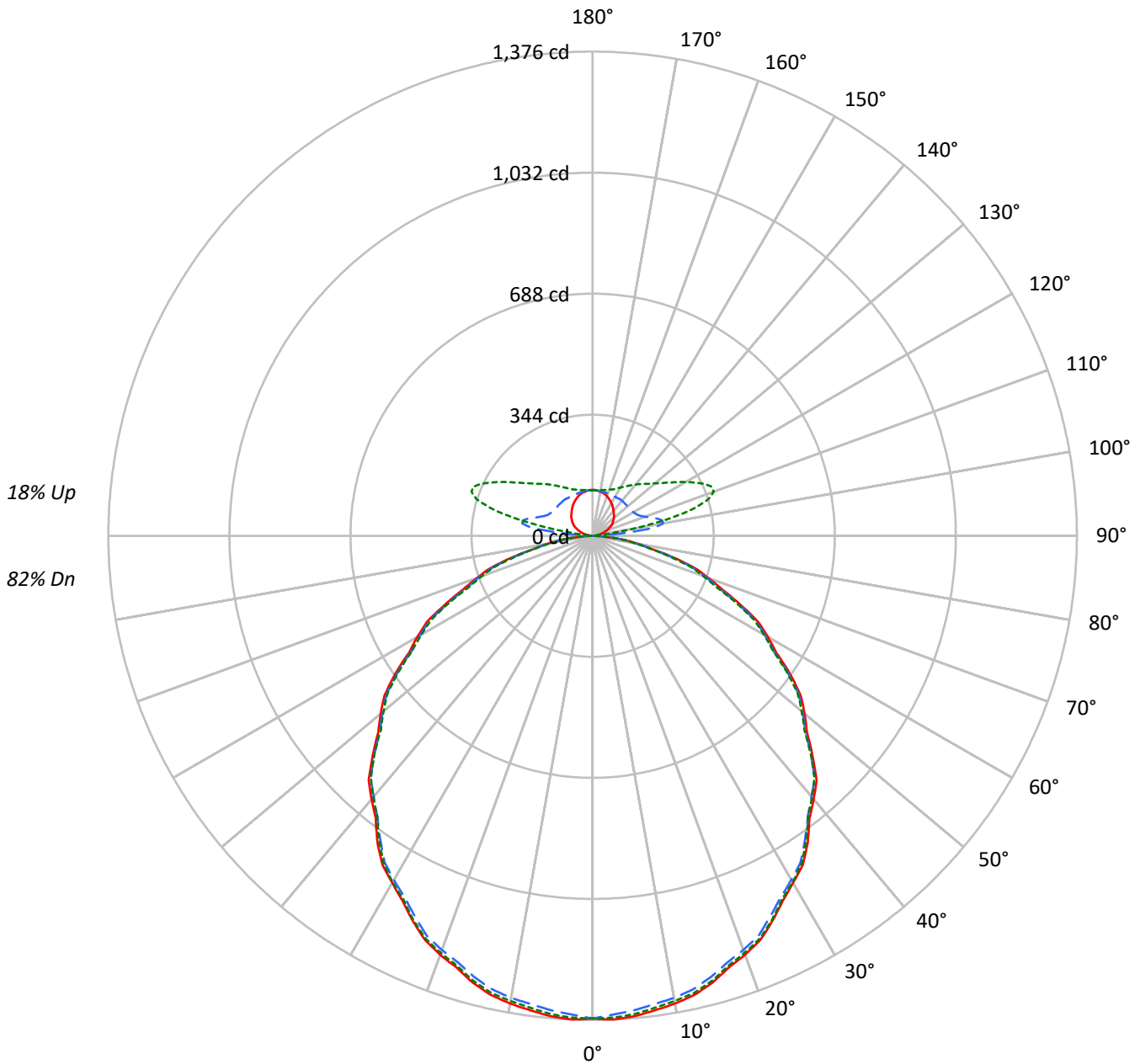
Lumens per Lamp: N/A  
Luminaire Lumens: 4587.5 lumens  
Efficiency: N/A  
Efficacy: 109.5 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35  
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')  
CIE Type: Semi-Direct

Input Watts (W): 41.9  
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	115	115	115	115	110	110	110	110	101	101	101	93	93	93	85	85	85	82																			
1	105	100	96	93	100	96	93	89	89	86	83	82	79	77	75	74	72	69																			
2	95	88	81	75	91	84	78	73	78	73	69	72	68	64	66	63	60	57																			
3	87	77	69	63	83	74	67	61	68	63	58	63	58	54	58	55	51	48																			
4	80	68	60	53	76	66	58	52	61	54	49	56	51	47	52	48	44	41																			
5	73	61	52	46	70	59	51	45	54	48	42	51	45	40	47	42	38	36																			
6	68	55	46	40	64	53	45	39	49	42	37	46	40	35	43	38	34	31																			
7	63	49	41	35	60	48	40	34	45	38	33	42	36	31	39	34	30	28																			
8	58	45	37	31	56	44	36	31	41	34	29	38	32	28	36	31	27	25																			
9	54	41	33	28	52	40	33	27	37	31	26	35	29	25	33	28	24	22																			
10	51	38	30	25	49	37	30	25	35	28	24	33	27	23	31	26	22	20																			

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	12657	12657	12657
5°	12690	12537	12638
10°	12646	12491	12577
15°	12559	12402	12508
20°	12440	12297	12388
25°	12300	12153	12266
30°	12130	12032	12111
35°	12000	11854	11914
40°	11771	11656	11679
45°	11526	11431	11431
50°	11283	11177	11127
55°	11020	10872	10813
60°	10608	10439	10372
65°	10103	9903	9780
70°	9414	9212	9015
75°	8441	8185	7985
80°	6833	6742	6540
85°	4065	4679	4848



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	129.4	2.8
10°-20°	368.6	8.0
20°-30°	553.7	12.1
30°-40°	660.9	14.4
40°-50°	677.3	14.8
50°-60°	604.0	13.2
60°-70°	449.8	9.8
70°-80°	244.2	5.3
80°-90°	56.9	1.2
90°-100°	51.7	1.1
100°-110°	179.8	3.9
110°-120°	174.2	3.8
120°-130°	136.6	3.0
130°-140°	108.2	2.4
140°-150°	83.5	1.8
150°-160°	59.8	1.3
160°-170°	36.6	0.8
170°-180°	12.4	0.3
0°-30°	1051.7	22.9
0°-40°	1712.6	37.3
0°-60°	2993.9	65.3
0°-90°	3744.7	81.6
90°-120°	405.7	8.8
90°-150°	734.0	16.0
90°-180°	843.0	18.4
0°-180°	4587.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1372	1372	1372	1372	1372	
5°	1370	1368	1354	1366	1365	130
15°	1315	1311	1298	1310	1310	370
25°	1208	1205	1194	1201	1205	556
35°	1065	1062	1052	1052	1058	665
45°	883	885	876	874	876	682
55°	685	685	676	670	672	610
65°	463	461	454	448	448	458
75°	237	235	230	226	224	250
85°	38	42	44	46	46	54
90°	2	3	3	2	1	2
95°	9	30	87	22	14	9
105°	30	43	189	319	297	32
115°	52	63	140	297	350	52
125°	71	87	131	221	264	63
135°	85	96	130	184	208	66
145°	100	107	129	159	172	62
155°	113	117	127	142	146	52
165°	124	125	128	134	135	35
175°	130	130	129	131	130	12
180°	130	130	130	130	130	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1371.9	1371.9	1371.9	1371.9	1371.9
2.5°	1376.2	1373.5	1361.6	1371.9	1370.6
5°	1370.2	1368.3	1353.7	1366.4	1364.6
7.5°	1360.1	1356.7	1342.2	1354.8	1352.8
10°	1349.8	1346.2	1333.3	1344.3	1342.5
12.5°	1336.7	1334.6	1320.3	1331.2	1330.7
15°	1314.9	1311.2	1298.4	1309.5	1309.5
17.5°	1286.4	1284.2	1271.6	1282.1	1281.0
20°	1267.0	1263.7	1252.5	1261.7	1261.7
22.5°	1243.7	1241.6	1230.6	1238.2	1239.6
25°	1208.3	1204.9	1193.8	1201.3	1204.9
27.5°	1169.6	1166.8	1157.5	1162.3	1164.8
30°	1138.6	1138.6	1129.4	1131.4	1136.8
32.5°	1110.8	1110.8	1100.1	1102.0	1104.6
35°	1065.4	1061.7	1052.5	1052.5	1057.8
37.5°	1012.2	1010.5	1004.7	1003.7	1005.1
40°	977.3	975.4	967.8	969.7	969.7
42.5°	941.9	940.0	932.4	930.1	932.9
45°	883.4	885.3	876.1	874.2	876.1
47.5°	825.9	825.9	818.5	813.3	816.0
50°	786.1	786.1	778.7	775.2	775.2
52.5°	744.9	746.4	737.4	732.5	734.0
55°	685.1	685.1	675.9	670.5	672.2
57.5°	618.8	618.8	609.8	604.3	607.5
60°	574.9	574.9	565.7	560.1	562.1
62.5°	530.8	530.8	521.7	516.2	516.4
65°	462.8	461.1	453.6	448.0	448.0
67.5°	397.4	392.7	387.1	379.9	379.9
70°	349.0	347.0	341.5	334.2	334.2
72.5°	304.9	301.6	296.0	290.2	290.2
75°	236.8	234.9	229.6	226.0	224.0
77.5°	169.8	168.2	167.8	162.7	164.2
80°	128.6	128.6	126.9	123.1	123.1
82.5°	91.8	93.2	90.0	89.2	87.7
85°	38.4	42.1	44.2	45.8	45.8
87.5°	7.5	11.5	10.3	11.8	11.8
90°	1.9	2.9	2.9	1.9	1.0
92.5°	4.8	14.5	13.6	5.8	4.8
95°	8.7	30.0	87.2	22.3	13.6
97.5°	13.6	33.9	174.4	79.5	42.6
100°	18.4	35.9	203.5	190.9	123.1
102.5°	24.2	38.8	202.5	268.4	220.9
105°	30.0	42.6	189.0	318.9	296.6



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	46.5	57.2	147.3	320.9	365.4
115°	52.3	63.0	140.5	296.6	349.9
117.5°	58.1	69.8	136.6	274.2	327.6
120°	63.0	75.6	133.7	252.9	305.4
122.5°	66.9	81.4	131.8	235.5	283.1
125°	70.7	87.2	130.8	220.9	263.6
127.5°	74.6	91.1	130.8	210.3	246.1
130°	78.5	93.0	129.9	199.6	231.6
132.5°	82.4	94.0	129.9	191.9	219.0
135°	85.3	95.9	129.9	184.1	208.3
137.5°	89.2	97.9	129.9	177.3	199.6
140°	92.1	100.8	129.9	170.6	189.9
142.5°	95.9	103.7	129.9	163.8	181.2
145°	99.8	106.6	128.9	158.9	172.5
147.5°	103.7	109.5	127.9	154.1	164.7
150°	106.6	112.4	127.9	149.2	158.0
152.5°	110.5	115.3	126.9	144.4	152.1
155°	113.4	117.3	126.9	141.5	146.3
157.5°	116.3	120.2	126.9	138.6	142.5
160°	119.2	122.1	127.9	136.6	139.5
162.5°	122.1	124.0	127.9	134.7	136.6
165°	124.0	125.0	127.9	133.7	134.7
167.5°	126.0	126.9	127.9	132.8	132.8
170°	126.9	127.9	128.9	131.8	131.8
172.5°	128.9	128.9	128.9	130.8	130.8
175°	129.9	129.9	128.9	130.8	129.9
177.5°	129.9	129.9	128.9	130.8	129.9
180°	129.9	129.9	129.9	129.9	129.9



Report Generated By 670246072 / DESKTOP-50001EG







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







107.5°	35.9	47.5	171.5	341.2	345.1
110°	40.7	52.3	158.0	338.3	366.4



(END OF REPORT)