

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: P845279

Luminaire Tested: **SQ4P-PW1-100U-075D-B35-1D-UNV**

Issue Date: 8/14/2023

**Test Information**

Test Method: LM-79-08  
Report Number: P845279  
REPORT IS A COMBINATION OF REPORTS P700096 AND P700246  
Test Lab: INNOVATION CENTER  
Issue Date: 8/14/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: SQ4P-PW1-100U-075D-B35-1D-UNV  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, 1000 LUMENS PER FOOT  
UPLIGHT, 750 LUMENS PER FOOT DOWNLIGHT  
  
Light Source: -  
Ballast/Driver: -

**Summary**

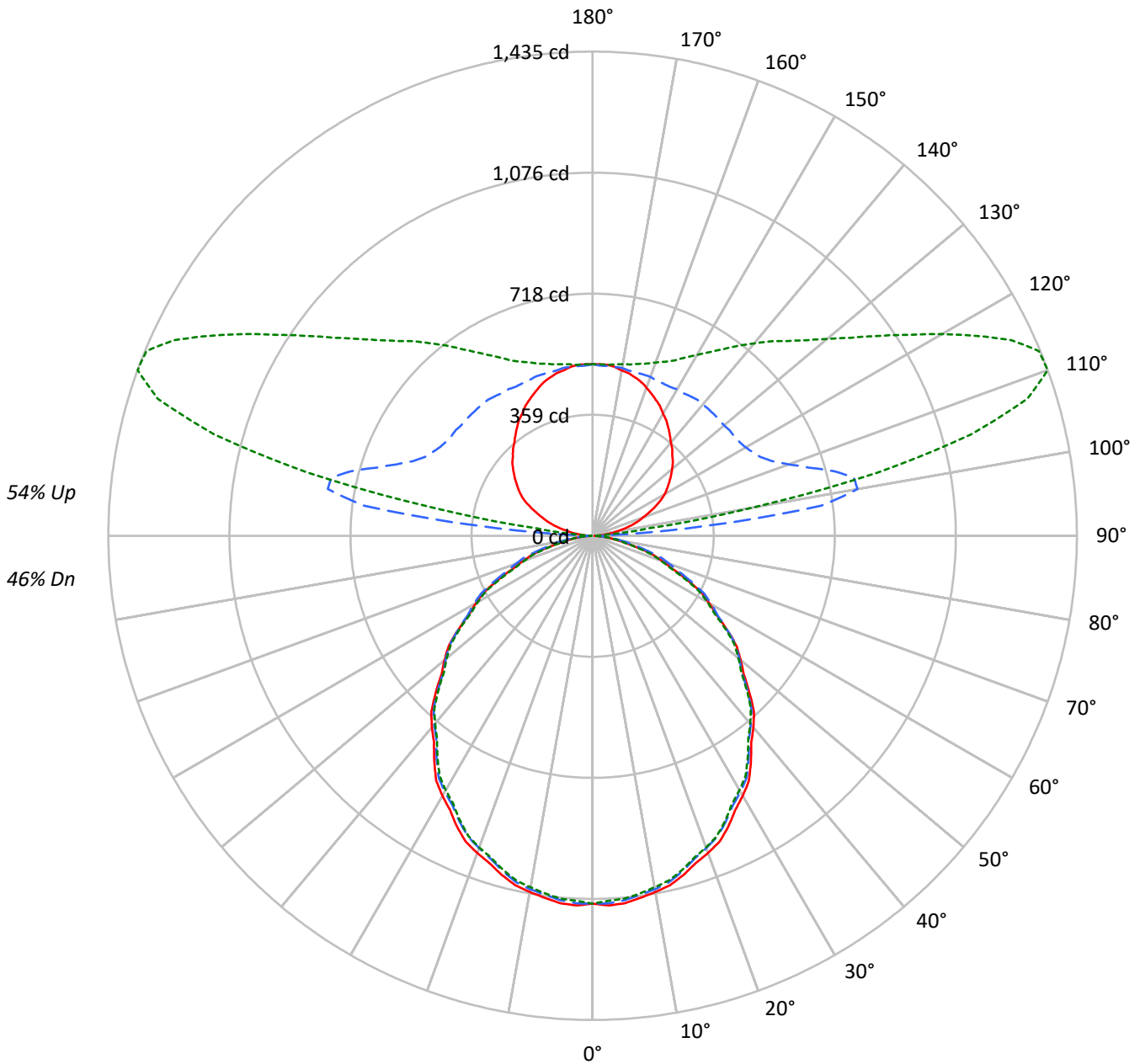
Lumens per Lamp: N/A  
Luminaire Lumens: 6076.3 lumens  
Efficiency: N/A  
Efficacy: 117.8 lumens/watt  
Spacing Criteria (0/90/45): 1.22 / 1.19 / 1.31  
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')  
CIE Type: General Diffuse

Input Watts (W): 51.6  
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					
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	97	97	97	97	81	81	81	66	66	66	52	52	52	46								
1	97	93	89	85	89	85	82	79	71	69	67	58	57	55	46	45	44	39								
2	88	81	75	70	81	75	69	65	62	59	55	51	48	46	41	39	37	33								
3	81	71	64	58	74	66	59	54	55	50	47	45	42	39	36	34	32	28								
4	74	63	55	49	67	58	51	46	49	44	40	40	37	33	32	30	27	24								
5	68	56	48	42	62	52	45	39	44	38	34	36	32	29	29	26	24	21								
6	62	50	42	37	57	47	39	34	39	34	30	33	29	25	26	23	21	18								
7	58	45	38	32	53	42	35	30	36	30	26	30	26	22	24	21	19	16								
8	53	41	34	28	49	38	31	27	33	27	23	27	23	20	22	19	17	14								
9	50	38	30	25	46	35	28	24	30	25	21	25	21	18	20	17	15	13								
10	46	34	27	23	43	32	26	21	27	22	19	23	19	16	19	16	14	12								

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

	0°	45°	90°
0°	10059	10059	10059
5°	10126	10045	10001
10°	10044	9963	9909
15°	9939	9828	9790
20°	9819	9667	9650
25°	9682	9506	9476
30°	9477	9335	9273
35°	9209	9077	9024
40°	8922	8781	8748
45°	8574	8462	8422
50°	8220	8151	8092
55°	7834	7834	7711
60°	7359	7499	7233
65°	6731	7067	6565
70°	5932	6504	5781
75°	5073	5821	4930
80°	3932	4904	3990
85°	2541	3769	3345



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	102.7	1.7
10°-20°	289.9	4.8
20°-30°	430.0	7.1
30°-40°	503.1	8.3
40°-50°	500.9	8.2
50°-60°	432.6	7.1
60°-70°	311.3	5.1
70°-80°	163.3	2.7
80°-90°	41.7	0.7
90°-100°	202.4	3.3
100°-110°	704.3	11.6
110°-120°	682.2	11.2
120°-130°	535.2	8.8
130°-140°	423.6	7.0
140°-150°	326.9	5.4
150°-160°	234.3	3.9
160°-170°	143.3	2.4
170°-180°	48.5	0.8
0°-30°	822.6	13.5
0°-40°	1325.7	21.8
0°-60°	2259.1	37.2
0°-90°	2775.5	45.7
90°-120°	1588.9	26.2
90°-150°	2874.6	47.3
90°-180°	3301.0	54.3
0°-180°	6076.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1090	1090	1090	1090	1090	
5°	1093	1081	1085	1082	1080	104
15°	1040	1027	1029	1027	1025	293
25°	951	935	934	928	931	437
35°	818	806	806	798	801	511
45°	657	651	648	646	646	507
55°	487	486	487	480	479	435
65°	308	318	324	311	301	306
75°	142	155	163	152	138	152
85°	24	32	36	34	32	32
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°	1090.3	1090.3	1090.3	1090.3	1090.3
2.5°	1096.6	1087.5	1090.3	1088.0	1082.7
5°	1093.3	1081.0	1084.6	1081.7	1079.8
7.5°	1082.2	1070.9	1073.4	1070.5	1069.3
10°	1072.1	1060.9	1063.5	1059.7	1057.7
12.5°	1060.7	1048.5	1051.3	1047.3	1046.3
15°	1040.5	1027.2	1028.9	1026.9	1025.0
17.5°	1016.9	1003.7	1003.9	1000.9	1000.4
20°	1000.1	986.0	984.6	980.8	982.9
22.5°	981.7	966.8	965.5	960.2	962.8
25°	951.1	935.1	933.8	928.1	930.8
27.5°	915.7	900.1	900.1	892.0	894.9
30°	889.6	874.5	876.2	866.6	870.4
32.5°	861.9	848.4	849.2	839.8	843.5
35°	817.6	806.3	805.9	798.3	801.2
37.5°	772.2	762.3	760.6	756.3	756.9
40°	740.8	732.3	729.1	726.3	726.3
42.5°	707.6	700.0	696.8	694.7	694.0
45°	657.1	651.4	648.5	646.5	645.5
47.5°	607.1	601.9	599.3	598.0	597.0
50°	572.7	568.8	567.9	564.8	563.8
52.5°	538.0	535.8	534.7	531.1	530.1
55°	487.0	486.2	487.0	480.4	479.4
57.5°	434.0	435.6	438.7	429.6	427.2
60°	398.8	402.4	406.4	395.8	392.0
62.5°	362.5	368.6	374.1	361.9	356.5
65°	308.3	317.7	323.7	311.0	300.7
67.5°	256.2	267.7	274.9	261.3	249.5
70°	219.9	233.2	241.1	227.3	214.3
72.5°	188.5	203.2	209.6	196.6	183.5
75°	142.3	155.3	163.3	152.4	138.3
77.5°	100.9	113.3	119.9	110.5	98.7
80°	74.0	87.1	92.3	84.3	75.1
82.5°	52.5	63.4	66.9	62.1	55.7
85°	24.0	31.5	35.6	33.7	31.6
87.5°	6.2	11.4	14.6	14.6	15.4
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



TEST NUMBER: P845279

CATALOG NUMBER: SQ4P-PW1-100U-075D-B35-1D-UNV

**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)