

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: P845280

Luminaire Tested: **SQ4P-PW1-100U-075D-B40-1D-UNV**

Issue Date: 8/14/2023

**Test Information**

Test Method: LM-79-08  
Report Number: P845280  
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-B40-1D-UNV  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, 1000 LUMENS PER FOOT  
UPLIGHT, 750 LUMENS PER FOOT DOWNLIGHT  
  
Light Source: -  
Ballast/Driver: -

**Summary**

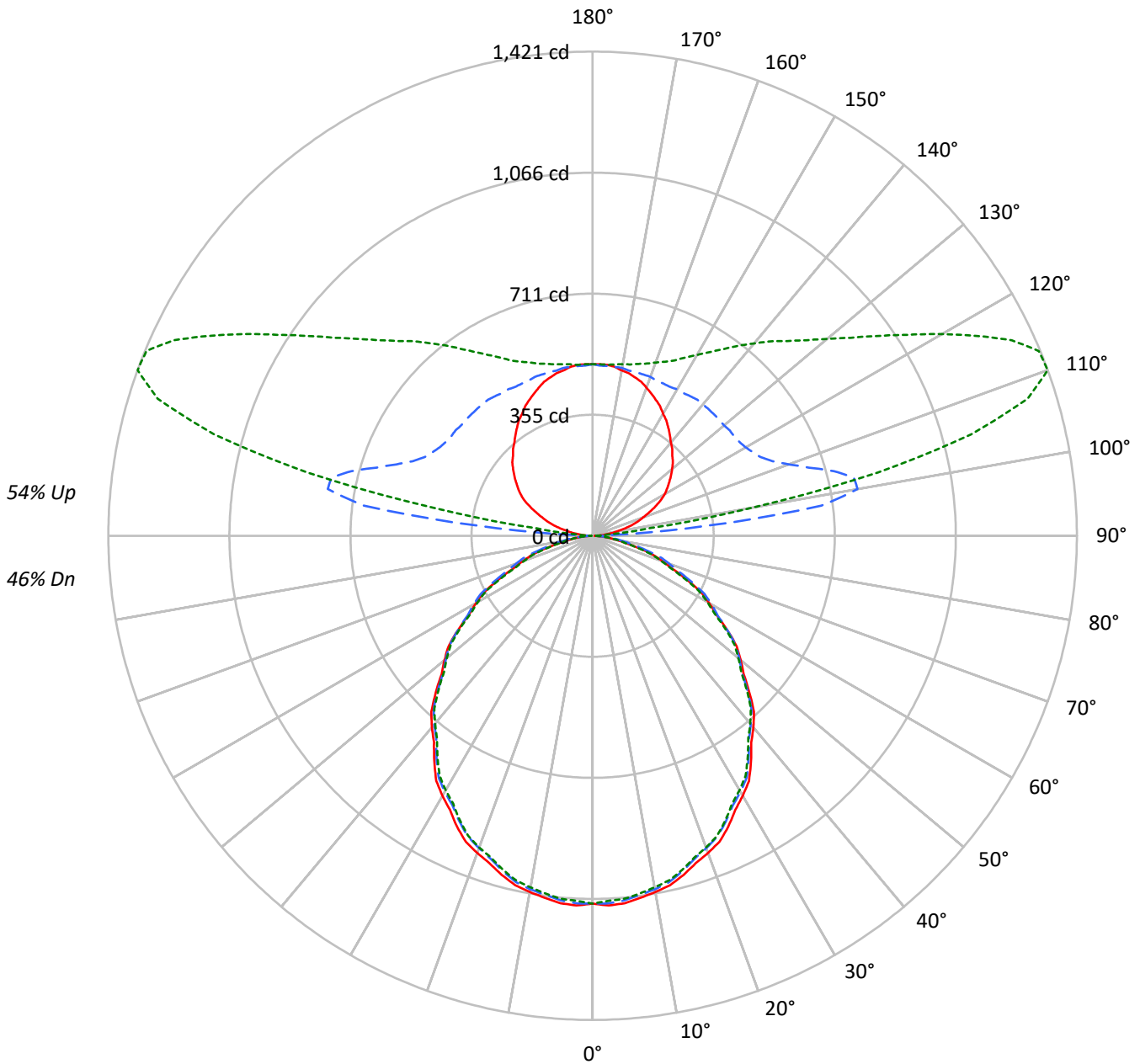
Lumens per Lamp: N/A  
Luminaire Lumens: 6017.2 lumens  
Efficiency: N/A  
Efficacy: 116.6 lumens/watt  
Spacing Criteria (0/90/45): 1.22 / 1.19 / 1.31  
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')  
CIE Type: General Diffuse

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

TEST NUMBER: P845280

CATALOG NUMBER: SQ4P-PW1-100U-075D-B40-1D-UNV

### Luminous Intensity Polar Plot





TEST NUMBER: P845280

CATALOG NUMBER: SQ4P-PW1-100U-075D-B40-1D-UNV

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

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

	0°	45°	90°
0°	9962	9962	9962
5°	10026	9948	9904
10°	9947	9867	9814
15°	9842	9732	9696
20°	9724	9574	9556
25°	9588	9414	9384
30°	9386	9244	9183
35°	9120	8989	8936
40°	8835	8696	8662
45°	8490	8379	8340
50°	8140	8071	8015
55°	7758	7758	7636
60°	7287	7427	7163
65°	6667	6999	6501
70°	5873	6442	5724
75°	5023	5764	4880
80°	3895	4856	3948
85°	2509	3737	3313



TEST NUMBER: P845280

CATALOG NUMBER: SQ4P-PW1-100U-075D-B40-1D-UNV

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	101.7	1.7
10°-20°	287.1	4.8
20°-30°	425.8	7.1
30°-40°	498.3	8.3
40°-50°	496.0	8.2
50°-60°	428.3	7.1
60°-70°	308.3	5.1
70°-80°	161.7	2.7
80°-90°	41.3	0.7
90°-100°	200.5	3.3
100°-110°	697.4	11.6
110°-120°	675.6	11.2
120°-130°	530.0	8.8
130°-140°	419.5	7.0
140°-150°	323.7	5.4
150°-160°	232.1	3.9
160°-170°	141.9	2.4
170°-180°	48.0	0.8
0°-30°	814.6	13.5
0°-40°	1312.8	21.8
0°-60°	2237.2	37.2
0°-90°	2748.5	45.7
90°-120°	1573.5	26.2
90°-150°	2846.7	47.3
90°-180°	3269.0	54.3
0°-180°	6017.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1080	1080	1080	1080	1080	
5°	1083	1070	1074	1071	1069	103
15°	1030	1017	1019	1017	1015	290
25°	942	926	925	919	922	433
35°	810	798	798	791	793	506
45°	651	645	642	640	639	502
55°	482	482	482	476	475	430
65°	305	315	321	308	298	303
75°	141	154	162	151	137	151
85°	24	31	35	33	31	31
90°	8	11	11	8	4	5
95°	34	116	338	86	53	36
105°	116	165	733	1237	1150	122
115°	203	244	545	1150	1357	200
125°	274	338	507	857	1022	246
135°	331	372	504	714	808	256
145°	387	414	500	616	669	242
155°	440	455	492	549	568	203
165°	481	485	496	519	522	136
175°	504	504	500	507	504	48
180°	504	504	504	504	504	



TEST NUMBER: P845280

CATALOG NUMBER: SQ4P-PW1-100U-075D-B40-1D-UNV

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1079.7	1079.7	1079.7	1079.7	1079.7
2.5°	1085.9	1076.9	1079.7	1077.4	1072.2
5°	1082.6	1070.5	1074.1	1071.2	1069.4
7.5°	1071.7	1060.5	1063.0	1060.1	1058.9
10°	1061.7	1050.6	1053.2	1049.4	1047.5
12.5°	1050.4	1038.4	1041.1	1037.1	1036.1
15°	1030.4	1017.2	1018.9	1016.9	1015.1
17.5°	1007.1	994.0	994.2	991.2	990.7
20°	990.4	976.4	975.1	971.3	973.3
22.5°	972.2	957.4	956.1	950.8	953.5
25°	941.8	926.0	924.8	919.1	921.8
27.5°	906.8	891.3	891.3	883.3	886.2
30°	881.0	866.1	867.7	858.2	862.0
32.5°	853.6	840.2	841.0	831.6	835.3
35°	809.7	798.5	798.1	790.6	793.4
37.5°	764.7	754.9	753.3	749.0	749.6
40°	733.6	725.1	722.0	719.2	719.2
42.5°	700.7	693.2	690.1	687.9	687.3
45°	650.7	645.1	642.2	640.3	639.2
47.5°	601.2	596.1	593.5	592.2	591.2
50°	567.1	563.3	562.3	559.3	558.4
52.5°	532.8	530.6	529.5	525.9	524.9
55°	482.3	481.5	482.3	475.7	474.7
57.5°	429.8	431.3	434.4	425.4	423.1
60°	394.9	398.5	402.5	392.0	388.2
62.5°	358.9	365.0	370.5	358.4	353.0
65°	305.4	314.7	320.6	308.0	297.8
67.5°	253.7	265.1	272.2	258.7	247.1
70°	217.7	230.9	238.8	225.1	212.2
72.5°	186.6	201.2	207.6	194.7	181.7
75°	140.9	153.8	161.7	150.9	136.9
77.5°	99.9	112.2	118.7	109.4	97.8
80°	73.3	86.2	91.4	83.4	74.3
82.5°	51.9	62.8	66.3	61.5	55.1
85°	23.7	31.2	35.3	33.3	31.3
87.5°	6.1	11.3	14.4	14.4	15.2
90°	7.6	11.2	11.2	7.6	3.8
92.5°	18.8	56.4	52.6	22.6	18.8
95°	33.8	116.5	338.3	86.4	52.6
97.5°	52.6	131.6	676.6	308.3	165.4
100°	71.4	139.1	789.3	740.5	477.4
102.5°	94.0	150.3	785.5	1041.2	856.9
105°	116.5	165.4	732.9	1236.6	1150.2



TEST NUMBER: P845280

CATALOG NUMBER: SQ4P-PW1-100U-075D-B40-1D-UNV

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	180.4	221.7	571.4	1244.1	1417.1
115°	202.9	244.3	545.0	1150.2	1356.9
117.5°	225.5	270.7	530.0	1063.7	1270.4
120°	244.3	293.1	518.7	981.0	1184.0
122.5°	259.3	315.7	511.2	913.3	1097.6
125°	274.3	338.3	507.4	856.9	1022.4
127.5°	289.5	353.3	507.4	815.7	954.7
130°	304.5	360.9	503.6	774.3	898.3
132.5°	319.5	364.6	503.6	744.2	849.5
135°	330.7	372.1	503.6	714.2	808.1
137.5°	345.8	379.6	503.6	687.8	774.3
140°	357.1	390.9	503.6	661.5	736.7
142.5°	372.1	402.2	503.6	635.2	702.9
145°	387.1	413.5	499.9	616.4	669.0
147.5°	402.2	424.7	496.2	597.6	639.0
150°	413.5	436.0	496.2	578.8	612.6
152.5°	428.5	447.3	492.4	560.0	590.2
155°	439.8	454.8	492.4	548.8	567.6
157.5°	451.0	466.1	492.4	537.5	552.6
160°	462.3	473.6	496.2	530.0	541.2
162.5°	473.6	481.1	496.2	522.4	530.0
165°	481.1	484.9	496.2	518.7	522.4
167.5°	488.6	492.4	496.2	515.0	515.0
170°	492.4	496.2	499.9	511.2	511.2
172.5°	499.9	499.9	499.9	507.4	507.4
175°	503.6	503.6	499.9	507.4	503.6
177.5°	503.6	503.6	499.9	507.4	503.6
180°	503.6	503.6	503.6	503.6	503.6



Report Generated By 670246072 / DESKTOP-50001EG







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







107.5°	139.1	184.2	665.3	1323.1	1338.1
110°	157.9	202.9	612.6	1311.8	1420.7



(END OF REPORT)