

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: P845256

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

Issue Date: 8/14/2023

**Test Information**

Test Method: LM-79-08  
Report Number: P845256  
REPORT IS A COMBINATION OF REPORTS P700236 AND P700245  
Test Lab: INNOVATION CENTER  
Issue Date: 8/14/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: SQ4P-PW1-075U-075D-B40-1D-UNV  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, 750 LUMENS PER FOOT  
UPLIGHT, 750 LUMENS PER FOOT DOWNLIGHT  
  
Light Source: -  
Ballast/Driver: -

**Summary**

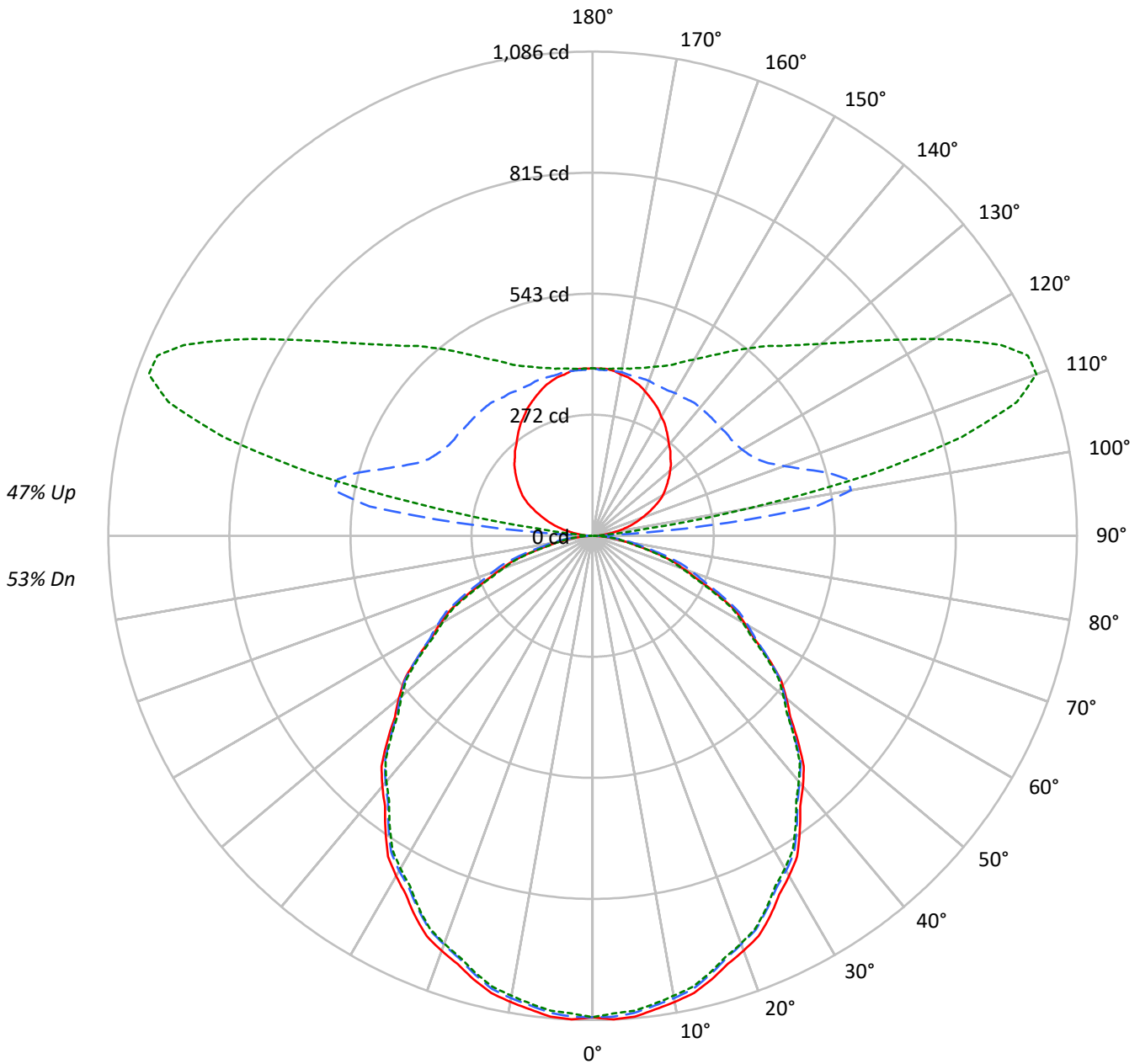
Lumens per Lamp: N/A  
Luminaire Lumens: 5184.7 lumens  
Efficiency: N/A  
Efficacy: 116.2 lumens/watt  
Spacing Criteria (0/90/45): 1.22 / 1.19 / 1.31  
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')  
CIE Type: General Diffuse

Input Watts (W): 44.6  
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	108	108	108	108	100	100	100	100	85	85	85	71	71	71	59	59	59	53			
1	99	94	90	87	91	87	84	81	75	72	70	63	61	60	52	51	50	45			
2	90	82	76	71	83	77	71	67	66	62	58	55	53	50	46	44	42	38			
3	82	73	65	59	76	67	61	56	58	53	49	49	45	42	41	38	36	32			
4	75	64	56	50	69	60	53	47	51	46	42	44	40	36	37	34	31	28			
5	69	57	49	43	64	53	46	41	46	40	36	39	35	32	33	30	27	24			
6	63	51	43	37	59	48	41	35	42	36	31	36	31	28	30	27	24	21			
7	59	46	38	33	54	43	36	31	38	32	28	32	28	24	27	24	21	19			
8	54	42	34	29	50	39	32	28	34	29	25	30	25	22	25	22	19	17			
9	51	38	31	26	47	36	29	25	32	26	22	27	23	20	23	20	17	15			
10	47	35	28	23	44	33	27	22	29	24	20	25	21	18	21	18	16	14			

**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



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	101.7	2.0
10°-20°	287.1	5.5
20°-30°	425.8	8.2
30°-40°	498.3	9.6
40°-50°	496.0	9.6
50°-60°	428.3	8.3
60°-70°	308.3	5.9
70°-80°	161.7	3.1
80°-90°	41.0	0.8
90°-100°	149.4	2.9
100°-110°	519.9	10.0
110°-120°	503.6	9.7
120°-130°	395.1	7.6
130°-140°	312.7	6.0
140°-150°	241.3	4.7
150°-160°	173.0	3.3
160°-170°	105.8	2.0
170°-180°	35.8	0.7
0°-30°	814.6	15.7
0°-40°	1312.8	25.3
0°-60°	2237.2	43.1
0°-90°	2748.2	53.0
90°-120°	1172.9	22.6
90°-150°	2122.0	40.9
90°-180°	2437.0	47.0
0°-180°	5184.7	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°	6	8	8	6	3	4
95°	25	87	252	64	39	27
105°	87	123	546	922	857	91
115°	151	182	406	857	1011	149
125°	205	252	378	639	762	183
135°	246	277	375	532	602	191
145°	289	308	373	460	499	181
155°	328	339	367	409	423	151
165°	359	362	370	387	390	101
175°	375	375	373	378	375	36
180°	375	375	375	375	375	



TEST NUMBER: P845256

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**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°	5.6	8.4	8.4	5.6	2.8
92.5°	14.1	42.1	39.2	16.8	14.1
95°	25.2	86.8	252.2	64.4	39.2
97.5°	39.2	98.1	504.3	229.8	123.3
100°	53.2	103.7	588.3	552.0	355.8
102.5°	70.1	112.0	585.6	776.1	638.8
105°	86.8	123.3	546.4	921.8	857.3



TEST NUMBER: P845256

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

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	134.5	165.3	425.9	927.4	1056.3
115°	151.3	182.1	406.2	857.3	1011.4
117.5°	168.1	201.8	395.1	792.9	947.0
120°	182.1	218.5	386.7	731.3	882.5
122.5°	193.3	235.4	381.0	680.9	818.1
125°	204.6	252.2	378.2	638.8	762.1
127.5°	215.7	263.4	378.2	608.0	711.7
130°	227.0	269.0	375.4	577.2	669.6
132.5°	238.1	271.7	375.4	554.8	633.2
135°	246.5	277.3	375.4	532.3	602.4
137.5°	257.8	283.0	375.4	512.7	577.2
140°	266.2	291.4	375.4	493.1	549.2
142.5°	277.3	299.8	375.4	473.5	523.9
145°	288.6	308.2	372.6	459.5	498.7
147.5°	299.8	316.6	369.8	445.5	476.3
150°	308.2	325.0	369.8	431.4	456.7
152.5°	319.4	333.4	367.0	417.5	439.9
155°	327.8	339.0	367.0	409.0	423.1
157.5°	336.2	347.4	367.0	400.6	411.9
160°	344.6	353.0	369.8	395.1	403.4
162.5°	353.0	358.7	369.8	389.5	395.1
165°	358.7	361.5	369.8	386.7	389.5
167.5°	364.3	367.0	369.8	383.8	383.8
170°	367.0	369.8	372.6	381.0	381.0
172.5°	372.6	372.6	372.6	378.2	378.2
175°	375.4	375.4	372.6	378.2	375.4
177.5°	375.4	375.4	372.6	378.2	375.4
180°	375.4	375.4	375.4	375.4	375.4



Report Generated By 670246072 / DESKTOP-50001EG







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







107.5°	103.7	137.3	495.9	986.2	997.5
110°	117.6	151.3	456.7	977.8	1059.1



(END OF REPORT)