

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: P845259

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

Issue Date: 8/14/2023

**Test Information**

Test Method: LM-79-08  
Report Number: P845259  
REPORT IS A COMBINATION OF REPORTS P700237 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-100D-B40-1D-UNV  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, 750 LUMENS PER FOOT UPLIGHT, 1000 LUMENS PER FOOT DOWNLIGHT  
  
Light Source: -  
Ballast/Driver: -

**Summary**

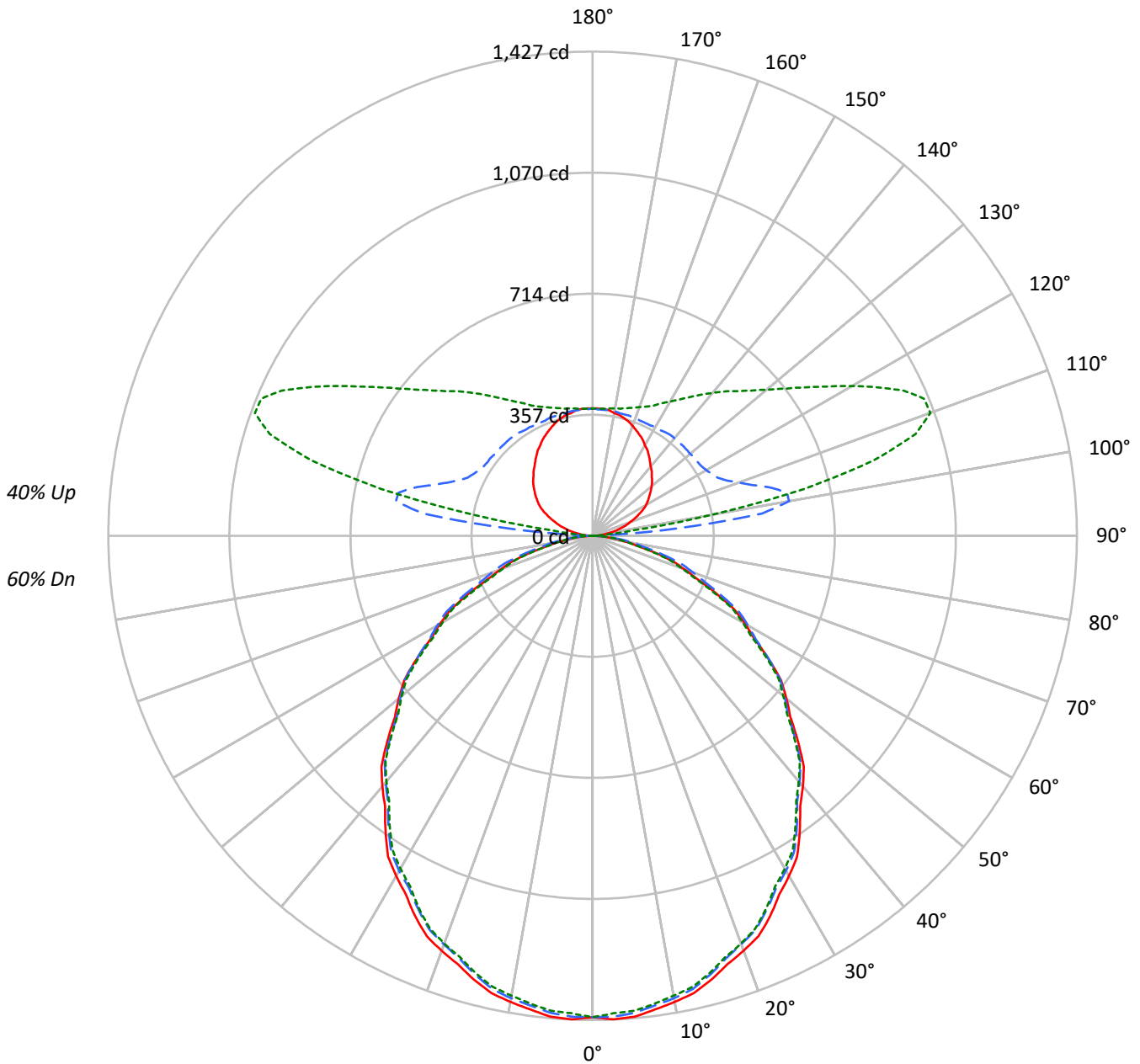
Lumens per Lamp: N/A  
Luminaire Lumens: 6047.2 lumens  
Efficiency: N/A  
Efficacy: 112.2 lumens/watt  
Spacing Criteria (0/90/45): 1.22 / 1.19 / 1.31  
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')  
CIE Type: General Diffuse

Input Watts (W): 53.9  
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	109	109	109	109	102	102	102	102	89	89	89	76	76	76	65	65	65	60																			
1	100	96	92	88	93	90	86	83	78	76	73	67	66	64	58	56	55	51																			
2	91	84	78	72	85	78	73	68	69	64	61	59	56	54	51	49	47	43																			
3	83	74	66	60	77	69	63	57	61	55	51	53	49	45	45	42	40	36																			
4	76	65	57	51	71	61	54	49	54	48	44	47	43	39	40	37	34	31																			
5	70	58	50	44	65	55	47	42	48	42	38	42	37	34	36	33	30	27																			
6	65	52	44	38	60	49	42	36	44	38	33	38	33	30	33	29	26	24																			
7	60	47	39	34	56	45	37	32	39	34	29	35	30	26	30	26	23	21																			
8	56	43	35	30	52	41	33	28	36	30	26	32	27	24	28	24	21	19																			
9	52	39	32	27	48	37	30	25	33	27	23	29	25	21	26	22	19	17																			
10	48	36	29	24	45	34	27	23	31	25	21	27	22	19	24	20	17	15																			

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

	0°	45°	90°
0°	13089	13089	13089
5°	13175	13071	13013
10°	13069	12964	12894
15°	12931	12788	12740
20°	12777	12579	12557
25°	12598	12370	12330
30°	12331	12146	12065
35°	11982	11812	11741
40°	11608	11426	11382
45°	11156	11010	10959
50°	10695	10606	10531
55°	10193	10193	10034
60°	9573	9758	9411
65°	8759	9197	8542
70°	7720	8462	7521
75°	6598	7571	6417
80°	5117	6381	5186
85°	3303	4901	4361



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	133.6	2.2
10°-20°	377.2	6.2
20°-30°	559.5	9.3
30°-40°	654.7	10.8
40°-50°	651.8	10.8
50°-60°	562.8	9.3
60°-70°	405.1	6.7
70°-80°	212.4	3.5
80°-90°	53.6	0.9
90°-100°	149.4	2.5
100°-110°	519.9	8.6
110°-120°	503.6	8.3
120°-130°	395.1	6.5
130°-140°	312.7	5.2
140°-150°	241.3	4.0
150°-160°	173.0	2.9
160°-170°	105.8	1.7
170°-180°	35.8	0.6
0°-30°	1070.3	17.7
0°-40°	1724.9	28.5
0°-60°	2939.5	48.6
0°-90°	3610.7	59.7
90°-120°	1172.9	19.4
90°-150°	2122.0	35.1
90°-180°	2437.0	40.3
0°-180°	6047.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1419	1419	1419	1419	1419	
5°	1423	1407	1411	1408	1405	135
15°	1354	1337	1339	1336	1334	382
25°	1238	1217	1215	1208	1211	569
35°	1064	1049	1049	1039	1042	665
45°	855	848	844	841	840	660
55°	634	633	634	625	624	565
65°	401	414	421	405	391	398
75°	185	202	212	198	180	198
85°	31	41	46	44	41	41
90°	6	8	8	6	3	5
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	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1418.7	1418.7	1418.7	1418.7	1418.7
2.5°	1426.8	1415.0	1418.7	1415.7	1408.7
5°	1422.6	1406.6	1411.3	1407.5	1405.1
7.5°	1408.1	1393.5	1396.7	1392.8	1391.3
10°	1395.0	1380.3	1383.8	1378.8	1376.3
12.5°	1380.1	1364.3	1367.8	1362.7	1361.3
15°	1353.8	1336.6	1338.8	1336.1	1333.8
17.5°	1323.3	1306.0	1306.2	1302.3	1301.6
20°	1301.3	1282.9	1281.2	1276.3	1278.9
22.5°	1277.3	1257.9	1256.2	1249.3	1252.8
25°	1237.5	1216.8	1215.1	1207.5	1211.2
27.5°	1191.6	1171.1	1171.1	1160.5	1164.4
30°	1157.5	1138.0	1140.1	1127.6	1132.5
32.5°	1121.6	1103.9	1104.9	1092.7	1097.7
35°	1063.8	1049.1	1048.7	1038.8	1042.4
37.5°	1004.7	991.8	989.7	984.1	985.0
40°	963.8	952.8	948.7	945.0	945.0
42.5°	920.7	910.8	906.8	903.9	903.1
45°	855.0	847.6	843.8	841.2	839.9
47.5°	789.9	783.3	779.8	778.1	776.8
50°	745.1	740.2	738.9	734.9	733.7
52.5°	700.1	697.0	695.8	691.0	689.8
55°	633.7	632.6	633.7	625.0	623.8
57.5°	564.8	566.7	570.8	559.0	556.0
60°	518.8	523.6	528.8	515.0	510.0
62.5°	471.6	479.7	486.8	470.8	463.9
65°	401.2	413.5	421.3	404.7	391.3
67.5°	333.4	348.4	357.7	340.0	324.7
70°	286.2	303.4	313.7	295.9	278.8
72.5°	245.2	264.4	272.8	255.7	238.8
75°	185.1	202.1	212.4	198.3	180.0
77.5°	131.2	147.4	156.0	143.7	128.4
80°	96.3	113.4	120.1	109.7	97.6
82.5°	68.3	82.6	87.0	80.8	72.4
85°	31.2	40.9	46.3	43.7	41.2
87.5°	7.9	14.8	19.0	19.0	20.1
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



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**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)