

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: P845283

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

Issue Date: 8/14/2023



**Test Information**

Test Method: LM-79-08  
Report Number: P845283  
REPORT IS A COMBINATION OF REPORTS P700097 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-100D-B40-1D-UNV  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, 1000 LUMENS PER FOOT  
UPLIGHT, 1000 LUMENS PER FOOT DOWNLIGHT  
  
Light Source: -  
Ballast/Driver: -

**Summary**

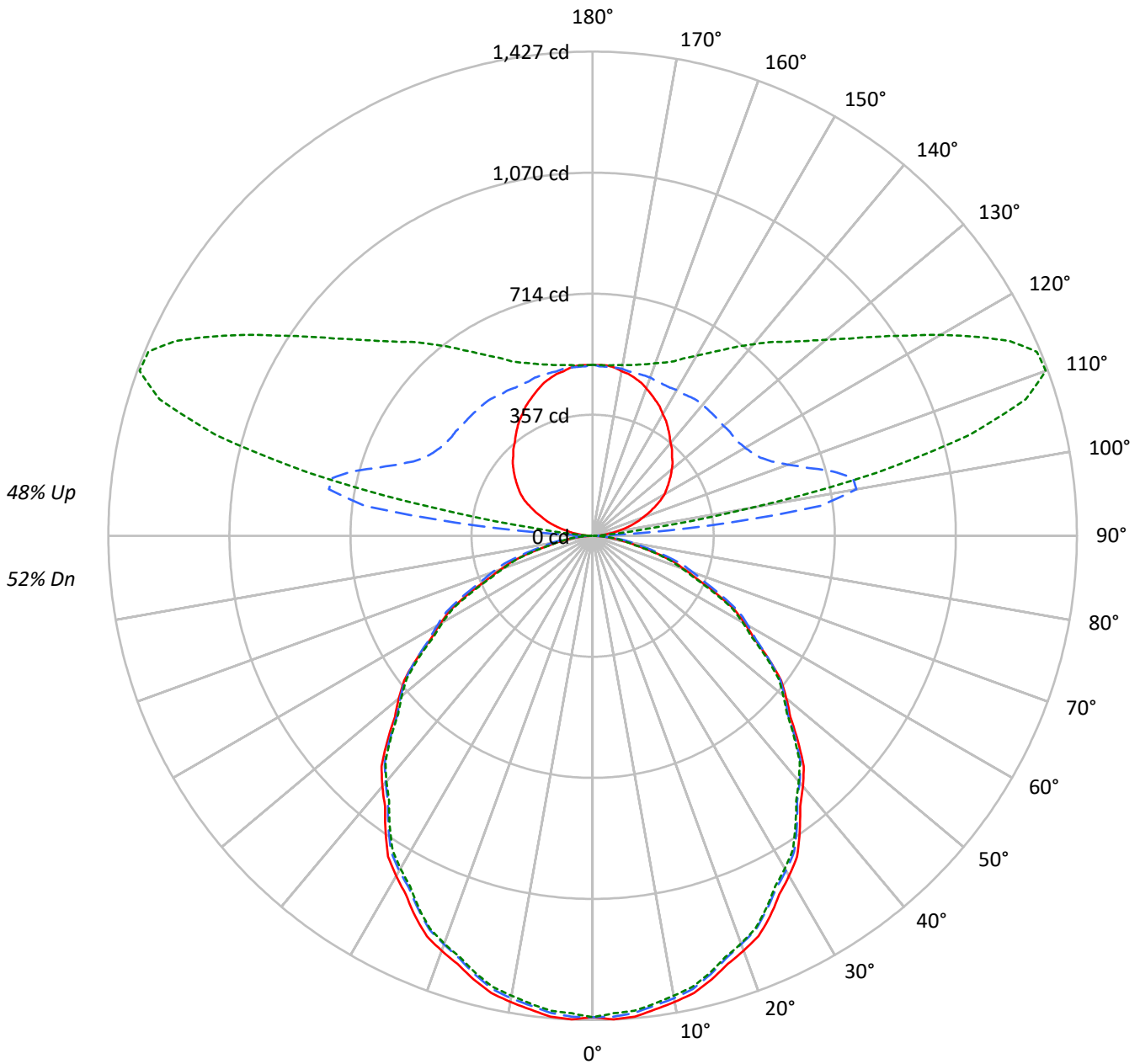
Lumens per Lamp: N/A  
Luminaire Lumens: 6879.7 lumens  
Efficiency: N/A  
Efficacy: 113.0 lumens/watt  
Spacing Criteria (0/90/45): 1.22 / 1.19 / 1.31  
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')  
CIE Type: General Diffuse

Input Watts (W): 60.9  
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				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	58	58	58	52			
1	98	94	90	87	91	87	84	81	74	72	70	63	61	59	52	51	50	44			
2	90	82	76	71	83	76	71	67	65	61	58	55	52	50	46	44	42	37			
3	82	72	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	39	36	36	33	31	27			
5	69	57	49	43	63	53	46	41	46	40	36	39	35	31	33	29	27	24			
6	63	51	43	37	58	48	41	35	41	36	31	35	31	27	30	26	24	21			
7	59	46	38	33	54	43	36	31	38	32	28	32	28	24	27	24	21	18			
8	54	42	34	29	50	39	32	28	34	29	25	29	25	22	25	21	19	17			
9	51	38	31	26	47	36	29	25	31	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	15	14			

**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	1.9
10°-20°	377.2	5.5
20°-30°	559.5	8.1
30°-40°	654.7	9.5
40°-50°	651.8	9.5
50°-60°	562.8	8.2
60°-70°	405.1	5.9
70°-80°	212.4	3.1
80°-90°	53.9	0.8
90°-100°	200.5	2.9
100°-110°	697.4	10.1
110°-120°	675.6	9.8
120°-130°	530.0	7.7
130°-140°	419.5	6.1
140°-150°	323.7	4.7
150°-160°	232.1	3.4
160°-170°	141.9	2.1
170°-180°	48.0	0.7
0°-30°	1070.3	15.6
0°-40°	1724.9	25.1
0°-60°	2939.5	42.7
0°-90°	3611.0	52.5
90°-120°	1573.5	22.9
90°-150°	2846.7	41.4
90°-180°	3269.0	47.5
0°-180°	6879.7	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°	8	11	11	8	4	6
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: P845283

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

**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°	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



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**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)