

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: P845282

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

Issue Date: 8/14/2023



**Test Information**

Test Method: LM-79-08  
Report Number: P845282  
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-B35-1D-UNV  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, 1000 LUMENS PER FOOT  
UPLIGHT, 1000 LUMENS PER FOOT DOWNLIGHT  
  
Light Source: -  
Ballast/Driver: -

**Summary**

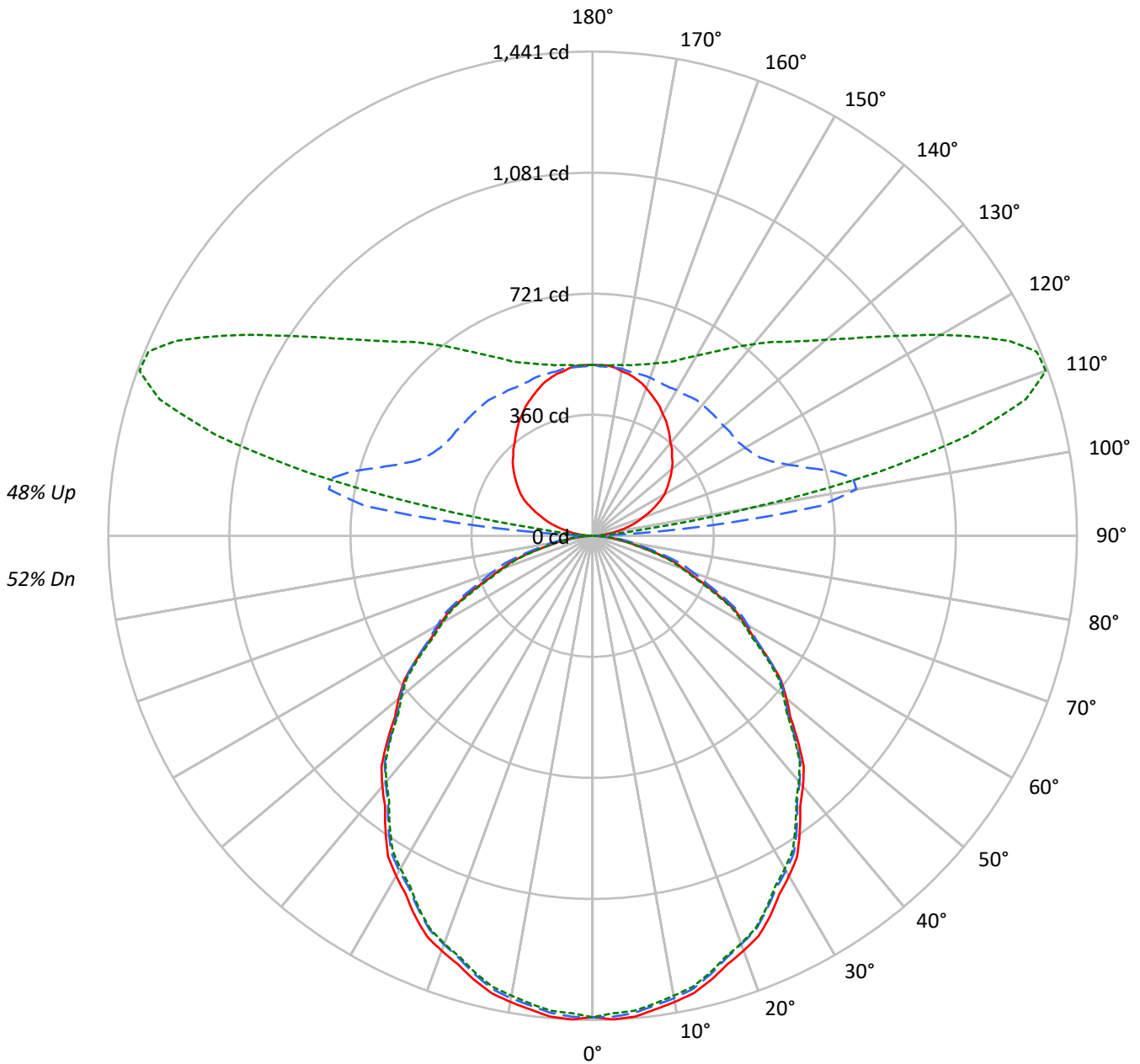
Lumens per Lamp: N/A  
Luminaire Lumens: 6947.2 lumens  
Efficiency: N/A  
Efficacy: 114.1 lumens/watt  
Spacing Criteria (0/90/45): 1.22 / 1.19 / 1.31  
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')  
CIE Type: General Diffuse

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°	13217	13217	13217
5°	13304	13199	13141
10°	13197	13092	13020
15°	13058	12913	12865
20°	12901	12703	12679
25°	12721	12491	12451
30°	12453	12265	12184
35°	12100	11928	11856
40°	11722	11538	11494
45°	11265	11117	11066
50°	10800	10711	10634
55°	10293	10293	10132
60°	9667	9854	9503
65°	8844	9287	8625
70°	7796	8546	7594
75°	6662	7646	6477
80°	5170	6440	5233
85°	3335	4954	4404



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	134.9	1.9
10°-20°	380.9	5.5
20°-30°	565.0	8.1
30°-40°	661.1	9.5
40°-50°	658.1	9.5
50°-60°	568.3	8.2
60°-70°	409.1	5.9
70°-80°	214.5	3.1
80°-90°	54.4	0.8
90°-100°	202.4	2.9
100°-110°	704.3	10.1
110°-120°	682.2	9.8
120°-130°	535.2	7.7
130°-140°	423.6	6.1
140°-150°	326.9	4.7
150°-160°	234.3	3.4
160°-170°	143.3	2.1
170°-180°	48.5	0.7
0°-30°	1080.8	15.6
0°-40°	1741.9	25.1
0°-60°	2968.3	42.7
0°-90°	3646.4	52.5
90°-120°	1588.9	22.9
90°-150°	2874.6	41.4
90°-180°	3301.0	47.5
0°-180°	6947.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1433	1433	1433	1433	1433	
5°	1436	1420	1425	1421	1419	136
15°	1367	1350	1352	1349	1347	385
25°	1250	1229	1227	1219	1223	575
35°	1074	1059	1059	1049	1053	672
45°	863	856	852	850	848	666
55°	640	639	640	631	630	571
65°	405	418	425	409	395	402
75°	187	204	214	200	182	200
85°	32	41	47	44	42	42
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	



TEST NUMBER: P845282

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

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1432.6	1432.6	1432.6	1432.6	1432.6
2.5°	1440.8	1428.9	1432.6	1429.6	1422.5
5°	1436.5	1420.4	1425.2	1421.3	1418.9
7.5°	1422.0	1407.2	1410.4	1406.5	1404.9
10°	1408.6	1393.9	1397.4	1392.3	1389.8
12.5°	1393.7	1377.7	1381.2	1376.1	1374.7
15°	1367.1	1349.7	1351.9	1349.2	1346.9
17.5°	1336.2	1318.8	1319.0	1315.1	1314.4
20°	1314.0	1295.5	1293.8	1288.8	1291.4
22.5°	1289.8	1270.3	1268.5	1261.6	1265.1
25°	1249.6	1228.7	1227.0	1219.4	1223.1
27.5°	1203.2	1182.6	1182.6	1171.9	1175.8
30°	1168.9	1149.1	1151.3	1138.7	1143.7
32.5°	1132.6	1114.7	1115.8	1103.4	1108.4
35°	1074.3	1059.4	1059.0	1049.0	1052.6
37.5°	1014.6	1001.6	999.4	993.7	994.6
40°	973.3	962.1	958.0	954.3	954.3
42.5°	929.7	919.8	915.6	912.8	911.9
45°	863.4	856.0	852.0	849.5	848.1
47.5°	797.6	791.0	787.5	785.7	784.4
50°	752.4	747.4	746.2	742.1	740.9
52.5°	706.9	703.9	702.6	697.8	696.5
55°	639.9	638.8	639.9	631.2	629.9
57.5°	570.3	572.3	576.4	564.4	561.4
60°	523.9	528.7	534.0	520.0	515.0
62.5°	476.3	484.4	491.5	475.4	468.4
65°	405.1	417.6	425.4	408.6	395.1
67.5°	336.6	351.8	361.2	343.4	327.9
70°	289.0	306.4	316.8	298.8	281.5
72.5°	247.6	267.0	275.5	258.2	241.1
75°	186.9	204.1	214.5	200.2	181.7
77.5°	132.5	148.8	157.5	145.1	129.7
80°	97.3	114.5	121.2	110.8	98.5
82.5°	69.0	83.4	87.9	81.6	73.1
85°	31.5	41.3	46.8	44.1	41.6
87.5°	8.0	15.0	19.2	19.2	20.3
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



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**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)