

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: P845246

Luminaire Tested: **SQ4P-PW1-050U-100D-B35-1D-UNV**

Issue Date: 8/14/2023

**Test Information**

Test Method: LM-79-08  
Report Number: P845246  
REPORT IS A COMBINATION OF REPORTS P700209 AND P700244  
Test Lab: INNOVATION CENTER  
Issue Date: 8/14/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: SQ4P-PW1-050U-100D-B35-1D-UNV  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, 500 LUMENS PER FOOT UPLIGHT, 1000 LUMENS PER FOOT DOWNLIGHT  
  
Light Source: -  
Ballast/Driver: -

**Summary**

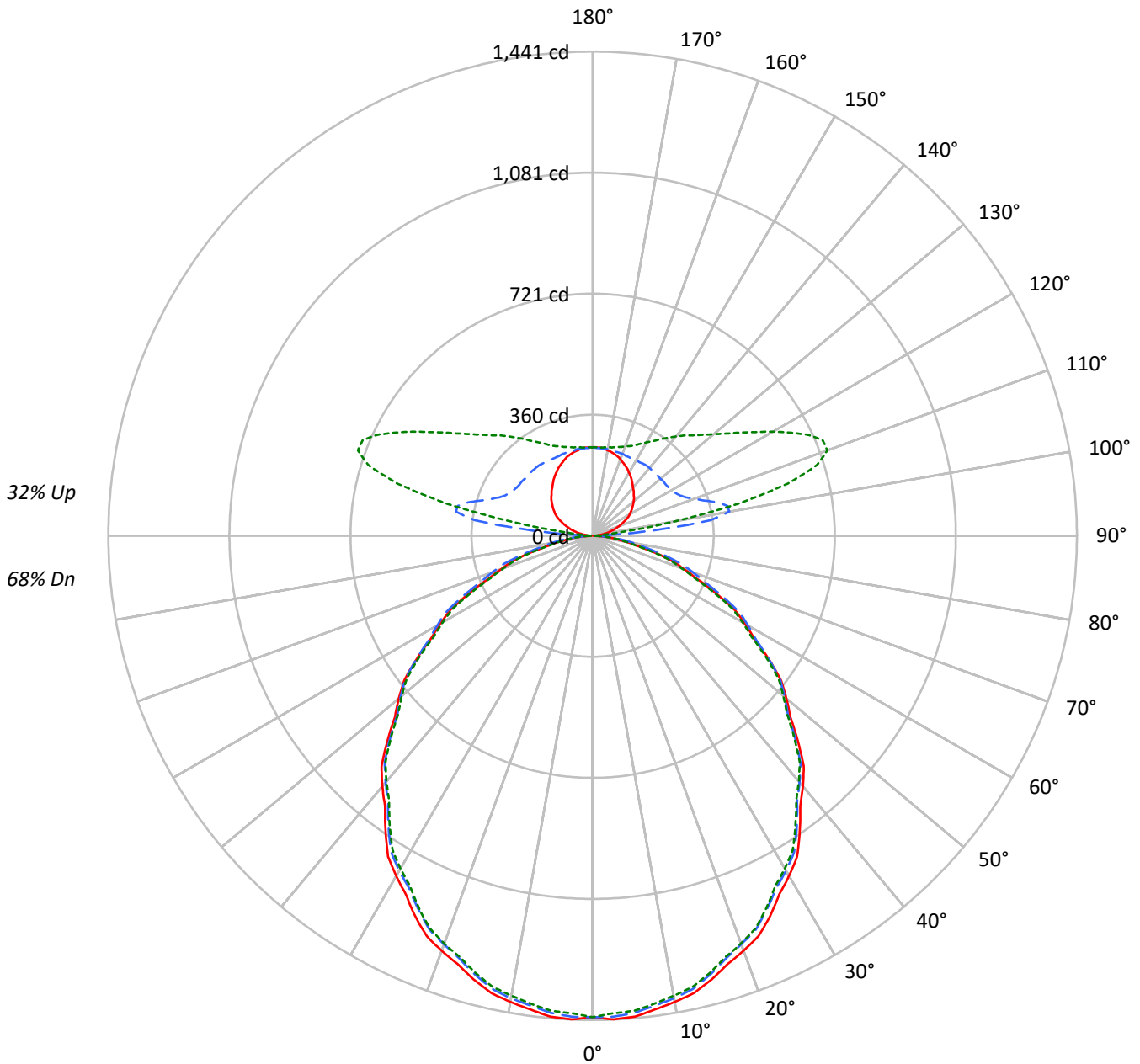
Lumens per Lamp: N/A  
Luminaire Lumens: 5356.0 lumens  
Efficiency: N/A  
Efficacy: 111.8 lumens/watt  
Spacing Criteria (0/90/45): 1.22 / 1.19 / 1.31  
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')  
CIE Type: Semi-Direct

Input Watts (W): 47.9  
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	111	111	111	111	105	105	105	105	93	93	93	83	83	83	73	73	73	68				68
1	102	98	94	90	96	92	89	86	82	80	77	73	71	69	65	63	62	58				58
2	93	85	79	74	87	81	75	71	72	68	64	64	61	58	57	54	52	48				48
3	85	75	68	62	80	71	64	59	64	58	54	57	53	49	51	47	45	41				41
4	78	67	59	52	73	63	56	50	57	51	46	51	46	42	45	41	38	35				35
5	71	60	51	45	67	57	49	43	51	45	40	46	41	37	41	37	34	31				31
6	66	54	45	39	62	51	43	38	46	40	35	41	36	32	37	33	30	27				27
7	61	48	40	35	57	46	39	33	42	36	31	38	32	29	34	30	26	24				24
8	57	44	36	31	53	42	35	30	38	32	28	35	29	26	31	27	24	21				21
9	53	40	33	27	50	39	31	27	35	29	25	32	27	23	29	24	21	19				19
10	50	37	30	25	47	36	29	24	32	27	22	29	24	21	27	22	19	18				18

**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	2.5
10°-20°	380.9	7.1
20°-30°	565.0	10.5
30°-40°	661.1	12.3
40°-50°	658.1	12.3
50°-60°	568.3	10.6
60°-70°	409.1	7.6
70°-80°	214.5	4.0
80°-90°	53.8	1.0
90°-100°	104.9	2.0
100°-110°	364.9	6.8
110°-120°	353.5	6.6
120°-130°	277.3	5.2
130°-140°	219.5	4.1
140°-150°	169.4	3.2
150°-160°	121.4	2.3
160°-170°	74.3	1.4
170°-180°	25.1	0.5
0°-30°	1080.8	20.2
0°-40°	1741.9	32.5
0°-60°	2968.3	55.4
0°-90°	3645.8	68.1
90°-120°	823.3	15.4
90°-150°	1489.4	27.8
90°-180°	1710.0	31.9
0°-180°	5356.0	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°	4	6	6	4	2	4
95°	18	61	177	45	28	19
105°	61	86	384	647	602	64
115°	106	128	285	602	710	105
125°	144	177	266	448	535	129
135°	173	195	264	374	423	134
145°	203	216	262	322	350	127
155°	230	238	258	287	297	106
165°	252	254	260	271	273	71
175°	264	264	262	266	264	25
180°	264	264	264	264	264	



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**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°	3.9	5.9	5.9	3.9	2.0
92.5°	9.8	29.5	27.5	11.8	9.8
95°	17.7	61.0	177.0	45.2	27.5
97.5°	27.5	68.8	353.9	161.3	86.5
100°	37.4	72.8	413.0	387.4	249.7
102.5°	49.1	78.7	411.0	544.7	448.4
105°	61.0	86.5	383.5	646.9	601.7



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	94.4	116.1	299.0	650.9	741.4
115°	106.2	127.8	285.2	601.7	709.9
117.5°	118.0	141.6	277.2	556.5	664.6
120°	127.8	153.3	271.4	513.3	619.4
122.5°	135.7	165.2	267.4	477.8	574.2
125°	143.6	177.0	265.5	448.4	534.9
127.5°	151.4	184.9	265.5	426.8	499.5
130°	159.3	188.8	263.5	405.1	470.0
132.5°	167.1	190.7	263.5	389.4	444.5
135°	173.0	194.6	263.5	373.6	422.8
137.5°	180.9	198.6	263.5	359.8	405.1
140°	186.8	204.5	263.5	346.1	385.5
142.5°	194.6	210.4	263.5	332.3	367.7
145°	202.6	216.4	261.6	322.5	350.0
147.5°	210.4	222.2	259.6	312.7	334.3
150°	216.4	228.1	259.6	302.9	320.6
152.5°	224.2	234.0	257.7	293.0	308.7
155°	230.1	238.0	257.7	287.1	296.9
157.5°	235.9	243.9	257.7	281.2	289.1
160°	241.9	247.8	259.6	277.2	283.2
162.5°	247.8	251.7	259.6	273.3	277.2
165°	251.7	253.6	259.6	271.4	273.3
167.5°	255.6	257.7	259.6	269.4	269.4
170°	257.7	259.6	261.6	267.4	267.4
172.5°	261.6	261.6	261.6	265.5	265.5
175°	263.5	263.5	261.6	265.5	263.5
177.5°	263.5	263.5	261.6	265.5	263.5
180°	263.5	263.5	263.5	263.5	263.5



Report Generated By 670246072 / DESKTOP-50001EG







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







107.5°	72.8	96.4	348.1	692.2	700.1
110°	82.6	106.2	320.6	686.3	743.3



(END OF REPORT)