

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: P845247

Luminaire Tested: **SQ4P-PW1-050U-100D-B40-1D-UNV**

Issue Date: 8/14/2023



Test Information

Test Method: LM-79-08
Report Number: P845247
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-B40-1D-UNV
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, 500 LUMENS PER FOOT UPLIGHT, 1000 LUMENS PER FOOT DOWNLIGHT

Light Source: -
Ballast/Driver: -

Summary

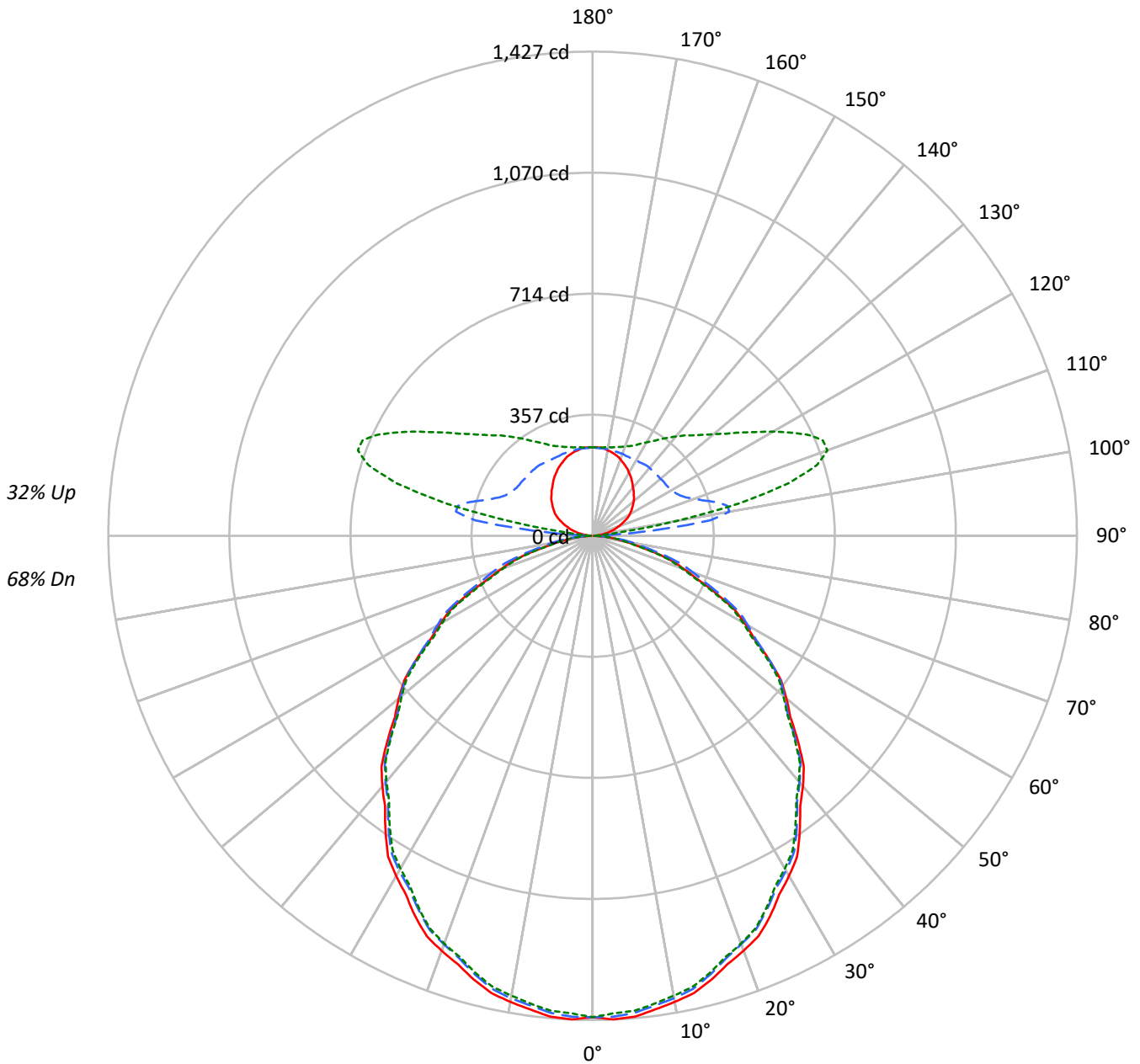
Lumens per Lamp: N/A
Luminaire Lumens: 5303.9 lumens
Efficiency: N/A
Efficacy: 110.7 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.19 / 1.31
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Direct

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

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	2.5
10°-20°	377.2	7.1
20°-30°	559.5	10.5
30°-40°	654.7	12.3
40°-50°	651.8	12.3
50°-60°	562.8	10.6
60°-70°	405.1	7.6
70°-80°	212.4	4.0
80°-90°	53.3	1.0
90°-100°	103.8	2.0
100°-110°	361.4	6.8
110°-120°	350.0	6.6
120°-130°	274.6	5.2
130°-140°	217.3	4.1
140°-150°	167.7	3.2
150°-160°	120.2	2.3
160°-170°	73.5	1.4
170°-180°	24.9	0.5
0°-30°	1070.3	20.2
0°-40°	1724.9	32.5
0°-60°	2939.5	55.4
0°-90°	3610.4	68.1
90°-120°	815.2	15.4
90°-150°	1474.9	27.8
90°-180°	1694.0	31.9
0°-180°	5303.9	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°	4	6	6	4	2	3
95°	18	60	175	45	27	19
105°	60	86	380	641	596	63
115°	105	127	282	596	703	104
125°	142	175	263	444	530	127
135°	171	193	261	370	419	133
145°	201	214	259	319	347	125
155°	228	236	255	284	294	105
165°	249	251	257	269	271	70
175°	261	261	259	263	261	25
180°	261	261	261	261	261	



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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°	3.9	5.8	5.8	3.9	1.9
92.5°	9.7	29.2	27.2	11.7	9.7
95°	17.5	60.4	175.3	44.8	27.2
97.5°	27.2	68.1	350.5	159.7	85.7
100°	37.0	72.1	408.9	383.7	247.3
102.5°	48.6	77.9	407.0	539.4	444.0
105°	60.4	85.7	379.8	640.6	595.9



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	93.5	114.9	296.0	644.6	734.2
115°	105.1	126.6	282.4	595.9	703.0
117.5°	116.9	140.2	274.5	551.1	658.2
120°	126.6	151.9	268.7	508.3	613.4
122.5°	134.4	163.6	264.8	473.2	568.6
125°	142.2	175.3	262.9	444.0	529.7
127.5°	149.9	183.1	262.9	422.6	494.6
130°	157.8	186.9	261.0	401.2	465.4
132.5°	165.5	188.9	261.0	385.6	440.1
135°	171.3	192.7	261.0	370.0	418.7
137.5°	179.2	196.7	261.0	356.3	401.2
140°	185.0	202.5	261.0	342.8	381.7
142.5°	192.7	208.3	261.0	329.1	364.2
145°	200.6	214.3	259.0	319.4	346.6
147.5°	208.3	220.1	257.1	309.6	331.0
150°	214.3	225.9	257.1	299.9	317.5
152.5°	222.0	231.7	255.2	290.1	305.7
155°	227.8	235.7	255.2	284.3	294.0
157.5°	233.6	241.5	255.2	278.5	286.3
160°	239.6	245.4	257.1	274.5	280.4
162.5°	245.4	249.2	257.1	270.7	274.5
165°	249.2	251.2	257.1	268.7	270.7
167.5°	253.1	255.2	257.1	266.8	266.8
170°	255.2	257.1	259.0	264.8	264.8
172.5°	259.0	259.0	259.0	262.9	262.9
175°	261.0	261.0	259.0	262.9	261.0
177.5°	261.0	261.0	259.0	262.9	261.0
180°	261.0	261.0	261.0	261.0	261.0



Report Generated By 670246072 / DESKTOP-50001EG





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







107.5°	72.1	95.5	344.7	685.5	693.3
110°	81.8	105.1	317.5	679.6	736.1



(END OF REPORT)