

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: P845245

Luminaire Tested: **SQ4P-PW1-050U-075D-B50-1D-UNV**

Issue Date: 8/14/2023



Test Information

Test Method: LM-79-08
Report Number: P845245
REPORT IS A COMBINATION OF REPORTS P700208 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-075D-B50-1D-UNV
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, 500 LUMENS PER FOOT UPLIGHT, 750 LUMENS PER FOOT DOWNLIGHT

Light Source: -
Ballast/Driver: -

Summary

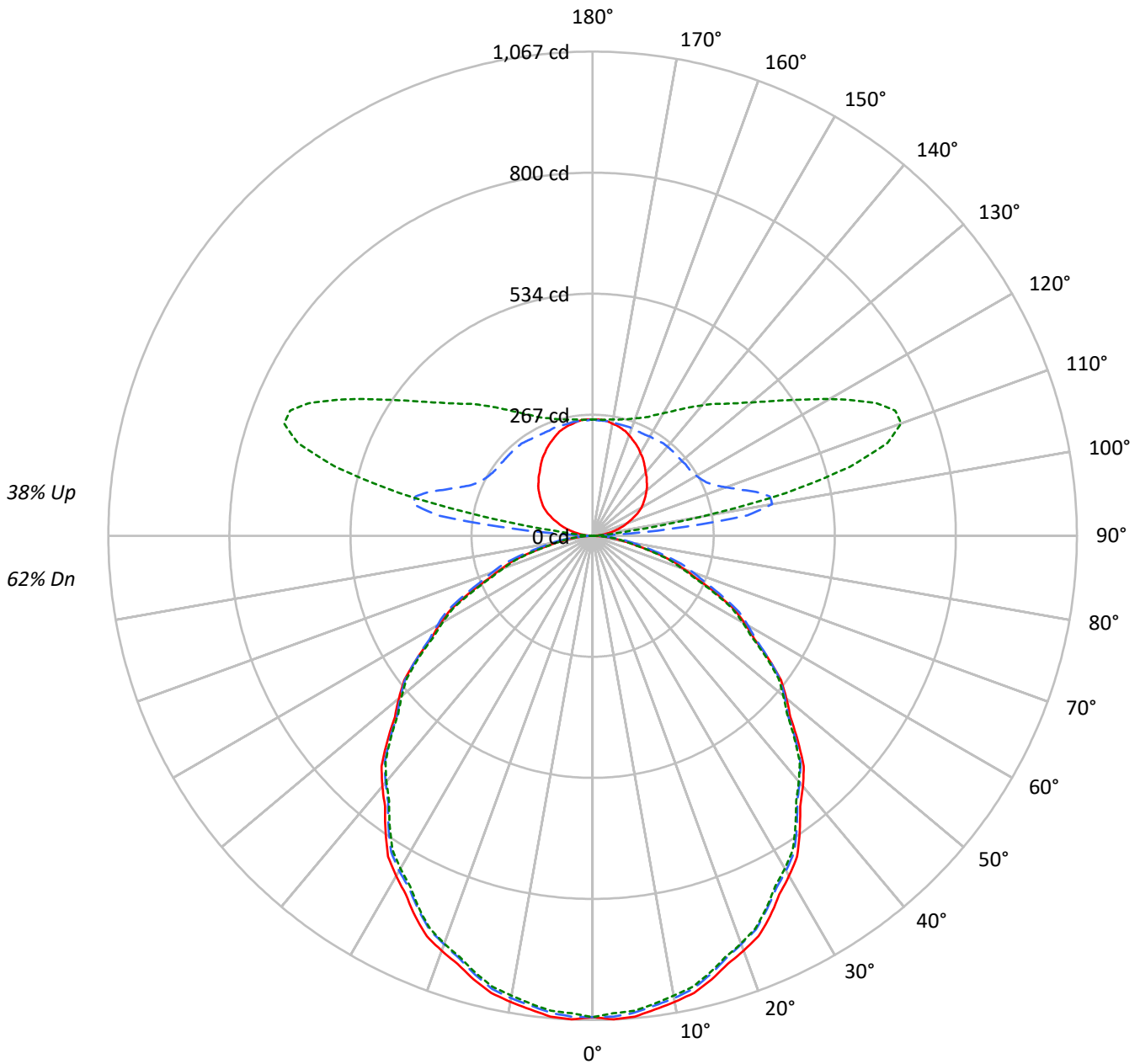
Lumens per Lamp: N/A
Luminaire Lumens: 4363.4 lumens
Efficiency: N/A
Efficacy: 113.0 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.19 / 1.31
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 38.6
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	110	110	110	110	103	103	103	103	90	90	90	78	78	78	67	67	67	62																			
1	101	96	92	89	94	90	87	84	79	77	74	69	67	65	59	58	57	52																			
2	92	84	78	73	86	79	74	69	69	65	62	61	57	55	52	50	48	44																			
3	84	74	67	61	78	70	63	58	61	56	52	54	50	46	47	44	41	37																			
4	77	66	58	51	71	62	55	49	55	49	44	48	43	40	42	38	35	32																			
5	70	59	50	44	66	55	48	42	49	43	38	43	38	35	38	34	31	28																			
6	65	53	44	38	61	50	42	37	44	38	34	39	34	30	34	30	27	25																			
7	60	48	39	34	56	45	38	32	40	34	30	35	31	27	31	27	24	22																			
8	56	43	35	30	52	41	34	29	37	31	26	32	28	24	29	25	22	19																			
9	52	40	32	27	49	38	31	26	34	28	24	30	25	22	26	23	20	18																			
10	49	36	29	24	46	35	28	23	31	25	21	28	23	20	25	21	18	16																			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9786	9786	9786
5°	9850	9773	9730
10°	9771	9694	9640
15°	9669	9561	9525
20°	9553	9405	9388
25°	9420	9249	9219
30°	9221	9081	9021
35°	8959	8831	8778
40°	8680	8544	8510
45°	8341	8232	8194
50°	7996	7930	7874
55°	7621	7621	7502
60°	7160	7296	7038
65°	6549	6875	6388
70°	5770	6328	5624
75°	4934	5664	4795
80°	3825	4771	3879
85°	2467	3673	3260



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	99.9	2.3
10°-20°	282.0	6.5
20°-30°	418.3	9.6
30°-40°	489.5	11.2
40°-50°	487.3	11.2
50°-60°	420.8	9.6
60°-70°	302.9	6.9
70°-80°	158.8	3.6
80°-90°	40.0	0.9
90°-100°	102.0	2.3
100°-110°	355.0	8.1
110°-120°	343.9	7.9
120°-130°	269.8	6.2
130°-140°	213.5	4.9
140°-150°	164.8	3.8
150°-160°	118.1	2.7
160°-170°	72.3	1.7
170°-180°	24.4	0.6
0°-30°	800.3	18.3
0°-40°	1289.7	29.6
0°-60°	2197.9	50.4
0°-90°	2699.6	61.9
90°-120°	800.9	18.4
90°-150°	1449.0	33.2
90°-180°	1664.0	38.1
0°-180°	4363.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1061	1061	1061	1061	1061	
5°	1064	1052	1055	1052	1051	101
15°	1012	999	1001	999	997	285
25°	925	910	908	903	906	425
35°	795	784	784	777	779	497
45°	639	634	631	629	628	493
55°	474	473	474	467	466	423
65°	300	309	315	303	293	297
75°	138	151	159	148	134	148
85°	23	31	35	33	31	31
90°	4	6	6	4	2	3
95°	17	59	172	44	27	18
105°	59	84	373	629	585	62
115°	103	124	277	585	691	102
125°	140	172	258	436	520	125
135°	168	189	256	364	411	130
145°	197	210	254	314	340	123
155°	224	232	251	279	289	103
165°	245	247	253	264	266	69
175°	256	256	254	258	256	24
180°	256	256	256	256	256	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1060.7	1060.7	1060.7	1060.7	1060.7
2.5°	1066.8	1058.0	1060.7	1058.5	1053.3
5°	1063.6	1051.7	1055.2	1052.4	1050.6
7.5°	1052.8	1041.9	1044.3	1041.4	1040.3
10°	1043.0	1032.1	1034.7	1030.9	1029.0
12.5°	1031.9	1020.1	1022.8	1018.9	1017.9
15°	1012.3	999.3	1001.0	999.1	997.2
17.5°	989.3	976.5	976.7	973.7	973.3
20°	973.0	959.3	957.9	954.2	956.2
22.5°	955.1	940.6	939.3	934.1	936.7
25°	925.3	909.8	908.5	902.9	905.6
27.5°	890.9	875.7	875.7	867.8	870.6
30°	865.5	850.8	852.4	843.1	846.8
32.5°	838.5	825.4	826.2	817.0	820.6
35°	795.4	784.5	784.1	776.7	779.4
37.5°	751.2	741.6	740.0	735.8	736.4
40°	720.7	712.4	709.4	706.6	706.6
42.5°	688.4	681.0	677.9	675.8	675.2
45°	639.3	633.8	630.9	629.0	628.0
47.5°	590.6	585.6	583.0	581.8	580.8
50°	557.1	553.4	552.5	549.5	548.6
52.5°	523.4	521.2	520.2	516.7	515.7
55°	473.8	473.1	473.8	467.3	466.4
57.5°	422.2	423.7	426.8	417.9	415.7
60°	388.0	391.5	395.4	385.1	381.4
62.5°	352.6	358.6	364.0	352.1	346.8
65°	300.0	309.1	314.9	302.6	292.6
67.5°	249.2	260.5	267.4	254.2	242.8
70°	213.9	226.9	234.6	221.2	208.5
72.5°	183.4	197.6	203.9	191.3	178.5
75°	138.4	151.1	158.9	148.2	134.5
77.5°	98.2	110.2	116.6	107.5	96.1
80°	72.0	84.7	89.8	82.0	73.0
82.5°	51.0	61.7	65.1	60.5	54.2
85°	23.3	30.7	34.7	32.7	30.8
87.5°	6.0	11.1	14.2	14.2	14.9
90°	3.8	5.7	5.7	3.8	1.9
92.5°	9.5	28.7	26.8	11.5	9.5
95°	17.2	59.3	172.2	44.0	26.8
97.5°	26.8	66.9	344.3	156.9	84.2
100°	36.4	70.8	401.8	376.9	243.0
102.5°	47.8	76.5	399.9	529.9	436.2
105°	59.3	84.2	373.1	629.4	585.4



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	91.9	112.9	290.8	633.3	721.3
115°	103.3	124.3	277.4	585.4	690.6
117.5°	114.8	137.8	269.7	541.4	646.6
120°	124.3	149.2	264.0	499.3	602.6
122.5°	132.0	160.7	260.2	464.9	558.6
125°	139.7	172.2	258.3	436.2	520.4
127.5°	147.3	179.8	258.3	415.2	485.9
130°	155.0	183.6	256.4	394.1	457.3
132.5°	162.6	185.5	256.4	378.8	432.4
135°	168.3	189.4	256.4	363.5	411.4
137.5°	176.0	193.3	256.4	350.1	394.1
140°	181.7	199.0	256.4	336.7	375.0
142.5°	189.4	204.7	256.4	323.3	357.8
145°	197.1	210.5	254.5	313.8	340.5
147.5°	204.7	216.2	252.6	304.2	325.2
150°	210.5	221.9	252.6	294.7	311.9
152.5°	218.1	227.6	250.7	285.0	300.4
155°	223.8	231.5	250.7	279.3	288.8
157.5°	229.5	237.2	250.7	273.6	281.2
160°	235.3	241.1	252.6	269.7	275.5
162.5°	241.1	244.9	252.6	265.9	269.7
165°	244.9	246.8	252.6	264.0	265.9
167.5°	248.7	250.7	252.6	262.1	262.1
170°	250.7	252.6	254.5	260.2	260.2
172.5°	254.5	254.5	254.5	258.3	258.3
175°	256.4	256.4	254.5	258.3	256.4
177.5°	256.4	256.4	254.5	258.3	256.4
180°	256.4	256.4	256.4	256.4	256.4



Report Generated By 670246072 / DESKTOP-50001EG





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







107.5°	70.8	93.8	338.6	673.5	681.1
110°	80.4	103.3	311.9	667.7	723.2



(END OF REPORT)