

Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: CORELITE

Report Number: P936707

Luminaire Tested: SQ4-FB-050U-050D-B50-1D-UNV-W2A-W-6

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P936707
REPORT IS A COMBINATION OF REPORTS P933477 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-050U-050D-B50-1D-UNV-W2A-W-6
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

Summary

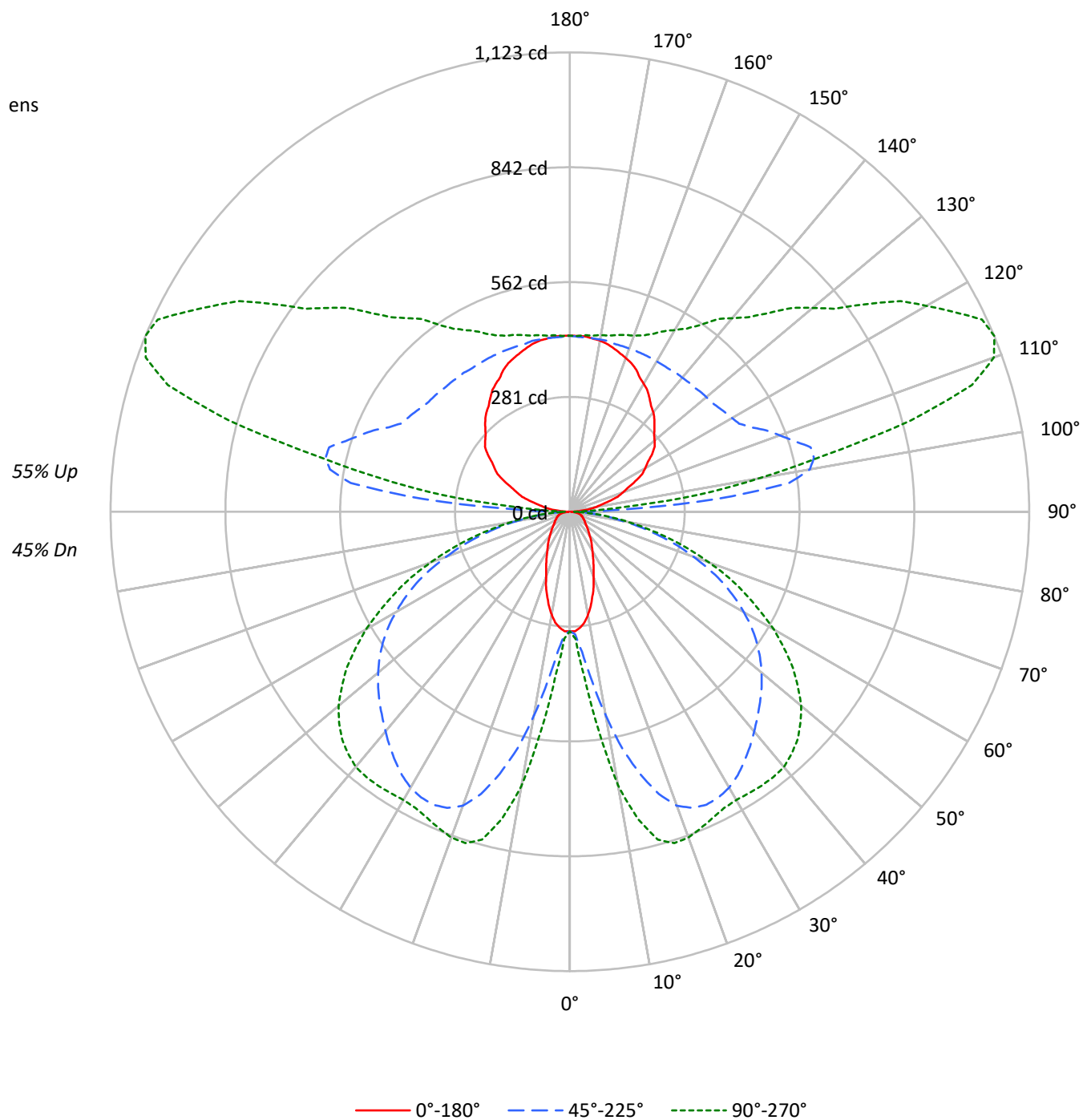
Lumens per Lamp: N/A
Luminaire Lumens: 5051.1 lumens
Efficiency: N/A
Efficacy: 118.6 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 6' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 42.6
Input Voltage (V): NR
Input Current (Ain): 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: 24 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
RC	80				70					50					30					0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
RCR																				
0	106	106	106	106	97	97	97	97	80	80	80	65	65	65	51	51	51	45	45	45
1	96	92	88	84	88	84	81	77	70	67	65	57	55	53	45	43	42	37	37	37
2	87	79	73	68	79	73	67	63	60	56	53	49	46	44	39	37	35	30	30	30
3	79	69	62	56	72	64	57	52	53	48	44	43	39	36	34	31	29	25	25	25
4	72	61	53	47	66	56	49	43	47	41	37	38	34	31	30	27	24	21	21	21
5	66	54	46	39	60	50	42	37	41	36	31	34	29	26	26	23	21	18	18	18
6	60	48	40	34	55	44	37	31	37	31	27	30	26	22	24	21	18	15	15	15
7	56	43	35	29	51	40	32	27	33	28	23	27	23	20	21	18	16	13	13	13
8	51	39	31	26	47	36	29	24	30	25	21	25	20	17	20	16	14	12	12	12
9	48	35	28	23	44	33	26	21	27	22	18	23	18	15	18	15	12	10	10	10
10	45	32	25	20	41	30	23	19	25	20	16	21	17	14	17	13	11	9	9	9

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1808	1808	1808
5°	1765	2088	2429
10°	1600	3044	4027
15°	1359	3975	4864
20°	1107	4606	4957
25°	923	4819	4856
30°	778	4848	4847
35°	688	4766	4972
40°	599	4660	5101
45°	542	4582	5122
50°	496	4512	5037
55°	475	4410	4814
60°	486	4214	4461
65°	505	3917	3976
70°	536	3414	3359
75°	592	2780	2622
80°	641	1925	1766
85°	560	1021	905

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 5122 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	37.8	0.7
10°-20°	167.5	3.3
20°-30°	293.0	5.8
30°-40°	377.2	7.5
40°-50°	421.3	8.3
50°-60°	403.5	8.0
60°-70°	319.8	6.3
70°-80°	188.0	3.7
80°-90°	53.9	1.1
90°-100°	209.7	4.2
100°-110°	551.4	10.9
110°-120°	571.7	11.3
120°-130°	458.6	9.1
130°-140°	359.8	7.1
140°-150°	276.2	5.5
150°-160°	198.9	3.9
160°-170°	121.7	2.4
170°-180°	41.1	0.8
0°-30°	498.3	9.9
0°-40°	875.5	17.3
0°-60°	1700.2	33.7
0°-90°	2261.9	44.8
90°-120°	1332.8	26.4
90°-150°	2427.4	48.1
90°-180°	2789.0	55.2
0°-180°	5051.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	292	292	292	292	292	
5°	285	305	344	389	403	26
15°	213	394	663	804	830	59
25°	136	446	790	825	826	63
35°	92	427	744	786	817	57
45°	63	340	658	754	787	49
55°	45	216	558	648	666	41
65°	36	115	414	466	472	35
75°	26	70	227	250	251	28
85°	9	22	56	62	63	10
90°	3	8	22	11	11	3
95°	28	108	361	186	127	31
105°	99	150	610	926	863	105
115°	176	214	488	974	1112	174
125°	246	275	444	750	885	218
135°	292	322	430	606	687	226
145°	339	361	425	517	557	213
155°	384	394	425	466	480	176
165°	414	419	425	442	447	117
175°	430	430	428	433	433	41
180°	430	430	430	430	430	

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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	292.2	292.2	292.2	292.2	292.2	292.2	292.2	292.2	292.2	292.2	292.2
2.5°	292.2	292.2	294.0	295.0	296.9	297.9	299.7	301.6	307.2	308.1	310.0
5°	284.7	288.4	300.7	305.3	318.5	336.3	343.8	356.0	381.4	388.9	393.7
7.5°	273.4	281.9	311.9	319.4	352.3	399.3	419.0	445.3	485.7	505.5	521.5
10°	255.5	273.4	326.9	344.8	398.4	469.7	506.4	543.0	604.1	631.3	641.7
12.5°	235.8	265.0	342.9	367.3	444.4	548.6	592.8	633.3	702.7	739.4	745.0
15°	213.2	252.7	357.9	393.7	493.2	614.4	663.2	713.1	777.9	804.2	810.8
17.5°	193.5	243.3	372.0	409.7	530.8	673.6	723.4	764.8	817.3	835.2	839.9
20°	169.1	228.3	381.4	430.3	570.3	716.8	764.8	796.7	832.4	843.7	845.6
22.5°	151.2	212.3	387.0	437.8	596.5	743.1	783.5	808.8	833.3	837.1	838.0
25°	136.3	194.5	386.1	446.3	619.1	759.1	790.1	808.8	822.9	824.8	824.8
27.5°	122.2	174.8	382.4	448.1	636.1	762.9	787.3	800.4	807.0	810.8	810.8
30°	109.9	156.0	372.9	444.4	643.5	759.1	778.9	785.4	791.9	797.6	800.4
32.5°	100.5	138.1	358.8	436.8	644.5	749.7	763.8	767.6	776.9	790.1	794.8
35°	92.1	120.3	342.9	426.6	638.9	734.7	744.0	747.9	766.6	786.3	792.9
37.5°	83.6	107.1	322.2	408.7	630.4	716.8	723.4	730.0	759.1	782.6	790.1
40°	75.2	95.8	297.9	388.9	617.3	695.2	700.9	711.1	749.7	776.9	784.5
42.5°	68.6	86.4	271.5	368.3	600.3	670.8	679.2	694.2	738.4	767.6	776.0
45°	63.0	77.1	243.3	340.1	578.7	645.4	657.6	678.3	725.3	753.5	760.9
47.5°	57.3	70.4	214.2	310.9	555.3	620.1	636.1	659.5	707.4	734.7	741.2
50°	52.6	63.9	185.1	279.9	529.9	592.8	611.6	636.1	684.9	710.2	718.7
52.5°	48.8	58.3	157.8	249.0	500.7	564.6	586.3	611.6	657.6	682.1	687.7
55°	45.1	53.5	134.3	216.0	470.6	534.5	558.1	582.4	627.6	648.2	652.0
57.5°	43.2	49.8	114.6	185.1	438.7	500.7	527.1	549.6	591.9	607.8	611.6
60°	40.4	47.0	99.6	158.8	404.0	468.8	491.4	513.9	549.6	562.7	565.5
62.5°	37.5	45.1	88.4	133.4	368.3	431.2	453.7	474.5	504.5	513.9	517.6
65°	35.7	43.2	79.9	114.6	331.7	391.7	414.3	432.2	456.5	466.0	467.8
67.5°	33.8	41.4	73.3	98.6	295.0	352.3	369.2	386.1	404.9	414.3	415.3
70°	31.0	39.4	67.6	87.3	257.4	307.2	321.3	339.1	354.2	358.8	361.7
72.5°	29.1	36.6	63.9	78.9	218.9	263.9	277.1	287.5	300.7	305.3	305.3
75°	26.3	32.9	60.1	70.4	179.4	216.0	227.3	237.7	248.0	249.9	247.0
77.5°	23.4	29.1	51.7	59.2	140.0	171.0	180.4	186.1	194.5	196.3	197.3
80°	19.7	25.4	40.4	46.0	101.4	125.9	132.4	137.2	144.7	144.7	146.5
82.5°	15.0	19.7	29.1	32.9	68.6	86.4	92.1	94.9	99.6	99.6	99.6
85°	9.4	12.2	18.8	21.6	41.4	52.6	56.4	57.3	61.1	62.0	62.0
87.5°	4.7	6.5	12.2	13.2	21.6	27.3	27.3	29.1	29.1	28.2	27.3
90°	2.9	5.2	7.6	8.1	12.7	18.9	21.9	19.5	14.6	10.9	10.9
92.5°	11.6	31.2	50.8	55.8	78.4	108.5	123.6	108.3	77.7	54.8	52.7
95°	27.7	63.6	99.6	108.5	192.8	305.1	361.3	322.4	244.6	186.2	179.6
97.5°	47.9	79.7	111.3	119.3	259.7	447.0	540.6	516.0	466.8	429.9	417.3
100°	63.5	92.3	121.0	128.2	284.0	491.8	595.7	597.5	601.1	603.8	588.9
102.5°	76.8	103.7	130.5	137.2	295.2	505.9	611.3	642.6	705.3	752.2	739.4
105°	99.4	122.1	144.8	150.5	303.5	507.5	609.5	679.8	820.1	925.5	918.6
107.5°	122.4	143.6	164.8	170.1	305.0	484.9	574.9	672.8	868.6	1015.5	1017.2
110°	138.0	157.1	176.2	181.0	302.7	464.9	546.0	655.5	874.5	1038.7	1045.9



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	153.4	171.6	189.8	194.4	302.8	447.5	519.8	631.9	855.9	1023.9	1035.0
115°	176.4	193.2	210.1	214.3	305.6	427.4	488.3	596.3	812.1	974.0	989.3
117.5°	199.2	214.5	229.8	233.6	311.3	414.9	466.6	564.0	758.9	905.0	922.0
120°	212.5	226.9	241.3	244.9	315.9	410.6	457.9	547.0	725.0	858.4	875.0
122.5°	225.6	240.0	254.5	258.2	322.5	408.3	451.3	531.4	691.8	812.0	828.3
125°	245.5	258.6	271.9	275.2	331.5	406.6	444.1	512.2	648.4	750.5	765.4
127.5°	261.6	275.0	288.3	291.7	340.4	405.5	438.0	496.5	613.4	701.1	713.7
130°	270.3	284.7	299.1	302.6	347.0	406.1	435.7	487.7	591.9	670.0	681.6
132.5°	279.3	293.6	308.0	311.6	352.3	406.6	433.7	480.4	573.5	643.3	653.8
135°	292.5	305.6	318.7	321.9	358.1	406.2	430.3	469.3	547.3	605.8	614.9
137.5°	306.1	319.1	331.9	335.2	366.7	408.6	429.6	462.6	528.6	578.1	585.4
140°	317.4	329.3	341.2	344.2	372.0	409.1	427.7	456.2	513.1	555.8	562.7
142.5°	326.0	337.0	348.0	350.8	376.4	410.6	427.7	452.7	502.7	540.2	546.2
145°	339.3	348.9	358.6	361.0	382.3	410.6	424.8	445.2	486.1	516.9	521.4
147.5°	352.6	361.9	371.4	373.7	390.7	413.4	424.8	440.8	473.1	497.3	501.0
150°	361.3	369.8	378.2	380.3	395.2	414.9	424.8	438.4	465.6	486.0	488.9
152.5°	370.1	376.6	383.0	384.6	398.0	415.8	424.8	436.4	459.6	477.0	479.2
155°	383.5	388.3	392.9	394.1	404.3	418.0	424.8	434.0	452.5	466.3	467.8
157.5°	393.3	397.9	402.6	403.7	410.7	420.1	424.8	432.0	446.4	457.1	458.1
160°	399.9	403.5	407.0	408.0	413.6	421.0	424.8	430.9	443.3	452.5	453.1
162.5°	406.6	409.3	412.0	412.6	416.7	422.1	424.8	430.0	440.4	448.1	448.7
165°	413.8	416.2	418.6	419.3	421.1	423.6	424.8	428.5	435.9	441.5	442.2
167.5°	420.4	421.5	422.7	423.0	424.6	426.7	427.7	430.1	435.0	438.6	438.9
170°	424.8	425.9	427.1	427.4	427.5	427.6	427.7	430.1	435.0	438.6	438.6
172.5°	427.1	427.4	427.6	427.7	427.7	427.7	427.7	429.5	433.4	436.3	436.1
175°	430.3	430.3	430.3	430.3	429.5	428.2	427.7	428.9	431.3	433.1	433.1
177.5°	430.3	430.3	430.3	430.3	429.6	428.7	428.2	429.2	431.1	432.5	432.3
180°	430.3	430.3	430.3	430.3	430.3	430.3	430.3	430.3	430.3	430.3	430.3

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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	292.2	292.2
2.5°	311.9	310.0
5°	401.2	403.0
7.5°	540.2	539.3
10°	671.7	680.1
12.5°	767.6	769.4
15°	825.8	829.6
17.5°	848.4	849.3
20°	849.3	847.4
22.5°	838.9	837.1
25°	826.8	825.8
27.5°	815.5	816.4
30°	810.8	813.6
32.5°	810.8	815.5
35°	812.7	817.3
37.5°	811.7	817.3
40°	807.9	814.5
42.5°	797.6	802.3
45°	781.7	787.3
47.5°	760.9	764.8
50°	734.7	738.4
52.5°	701.8	702.7
55°	662.3	666.1
57.5°	620.1	621.0
60°	573.1	575.9
62.5°	523.3	523.3
65°	470.6	472.5
67.5°	416.2	420.9
70°	360.8	361.7
72.5°	306.3	306.3
75°	249.9	250.9
77.5°	196.3	196.3
80°	145.6	146.5
82.5°	100.5	102.4
85°	63.0	63.0
87.5°	29.1	26.3
90°	10.9	10.9
92.5°	43.9	35.2
95°	153.2	126.7
97.5°	367.1	316.8
100°	528.9	469.0
102.5°	688.1	636.7
105°	891.0	863.4
107.5°	1023.9	1030.6
110°	1074.6	1103.3

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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	1079.1	1123.2
115°	1050.5	1111.7
117.5°	989.9	1057.8
120°	940.9	1006.9
122.5°	893.4	958.4
125°	825.4	885.3
127.5°	764.3	814.9
130°	728.3	775.0
132.5°	695.6	737.5
135°	650.9	687.0
137.5°	615.0	644.6
140°	590.3	617.9
142.5°	569.9	593.7
145°	539.4	557.3
147.5°	515.8	530.7
150°	501.1	513.1
152.5°	488.4	497.5
155°	473.9	479.9
157.5°	462.4	466.6
160°	455.5	457.9
162.5°	451.0	453.4
165°	444.6	447.0
167.5°	439.9	440.9
170°	438.6	438.6
172.5°	435.2	434.3
175°	433.1	433.1
177.5°	431.3	430.3
180°	430.3	430.3

(END OF REPORT)