

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: P937506

Luminaire Tested: SQ4-FB-100U-050D-B50-1D-UNV-W2A-W-4

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P937506
REPORT IS A COMBINATION OF REPORTS P933565 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-100U-050D-B50-1D-UNV-W2A-W-4
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

Summary

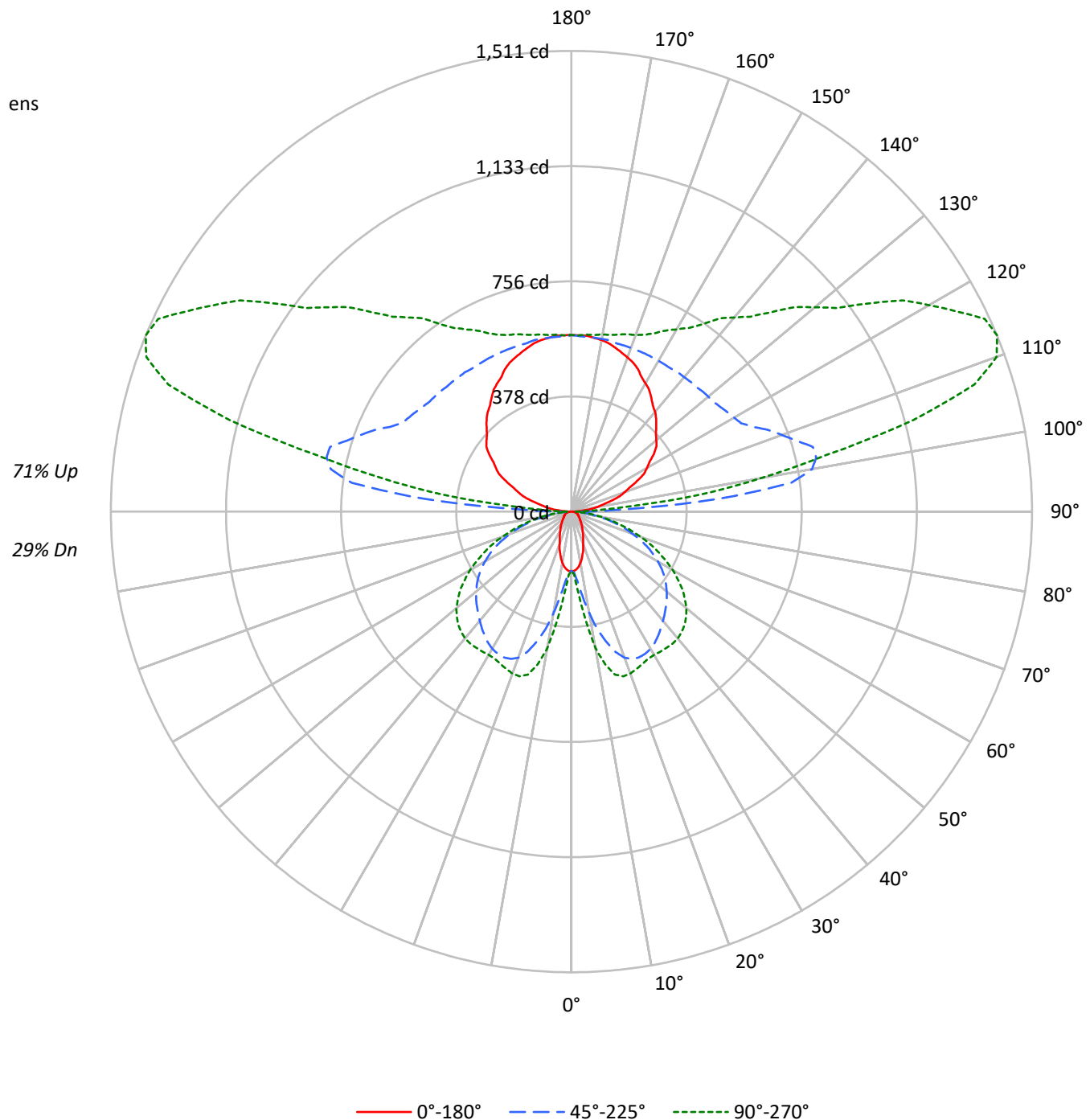
Lumens per Lamp: N/A
Luminaire Lumens: 5262.1 lumens
Efficiency: N/A
Efficacy: 127.7 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 41.2
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	102	102	102	102	91	91	91	91	71	71	71	53	53	53	37	37	37	37	37	29
1	93	88	84	81	83	79	76	73	62	60	58	46	45	44	32	31	30	30	30	23
2	84	77	71	66	75	69	64	59	54	50	47	40	38	36	28	26	25	25	25	19
3	76	67	60	54	68	60	54	49	47	43	39	35	32	30	24	22	21	21	21	16
4	70	59	51	45	62	53	46	41	42	37	33	31	28	25	21	19	18	18	18	13
5	64	52	44	38	57	47	40	35	37	32	28	28	24	21	19	17	15	15	15	11
6	58	47	39	33	52	42	35	30	33	28	24	25	21	18	17	15	13	13	13	10
7	54	42	34	28	48	38	31	26	30	25	21	22	19	16	15	13	11	11	11	8
8	50	38	30	25	44	34	27	23	27	22	18	20	17	14	14	12	10	10	10	7
9	46	34	27	22	41	31	24	20	24	20	16	18	15	12	13	11	9	9	9	7
10	43	31	24	19	38	28	22	18	22	18	14	17	14	11	12	10	8	8	8	6

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1808	1808	1808
5°	1765	2088	2430
10°	1599	3042	4029
15°	1357	3971	4866
20°	1104	4599	4959
25°	920	4809	4858
30°	774	4835	4849
35°	684	4751	4974
40°	596	4644	5103
45°	536	4563	5124
50°	492	4489	5039
55°	470	4384	4815
60°	479	4186	4463
65°	496	3887	3977
70°	523	3383	3362
75°	577	2751	2623
80°	618	1902	1768
85°	522	1004	903

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 5124 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	25.2	0.5
10°-20°	111.7	2.1
20°-30°	195.4	3.7
30°-40°	251.5	4.8
40°-50°	281.0	5.3
50°-60°	269.1	5.1
60°-70°	213.3	4.1
70°-80°	125.4	2.4
80°-90°	37.0	0.7
90°-100°	282.1	5.4
100°-110°	741.8	14.1
110°-120°	769.2	14.6
120°-130°	617.0	11.7
130°-140°	484.1	9.2
140°-150°	371.6	7.1
150°-160°	267.6	5.1
160°-170°	163.7	3.1
170°-180°	55.3	1.1
0°-30°	332.3	6.3
0°-40°	583.9	11.1
0°-60°	1134.0	21.5
0°-90°	1509.7	28.7
90°-120°	1793.2	34.1
90°-150°	3265.8	62.1
90°-180°	3752.0	71.3
0°-180°	5262.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	195	195	195	195	195	
5°	190	204	229	259	269	18
15°	142	262	442	536	553	40
25°	91	298	527	550	551	42
35°	61	284	496	524	545	38
45°	42	227	439	502	525	32
55°	30	144	372	432	444	27
65°	24	76	276	311	315	24
75°	18	47	152	167	167	18
85°	6	14	38	41	42	7
90°	4	11	30	15	15	4
95°	37	146	486	251	170	41
105°	134	202	820	1245	1162	142
115°	237	288	657	1310	1496	234
125°	330	370	598	1010	1191	293
135°	394	433	579	815	924	304
145°	456	486	572	695	750	286
155°	516	530	572	627	646	237
165°	557	564	572	594	601	157
175°	579	579	575	583	583	55
180°	579	579	579	579	579	

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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	194.8	194.8	194.8	194.8	194.8	194.8	194.8	194.8	194.8	194.8	194.8
2.5°	194.8	194.8	196.1	196.7	198.0	198.7	199.9	201.1	204.9	205.5	206.8
5°	189.9	192.4	200.5	203.6	212.4	224.3	229.3	237.5	254.4	259.4	262.5
7.5°	182.3	188.0	208.0	213.0	235.0	266.3	279.5	297.0	323.9	337.1	347.7
10°	170.5	182.3	218.1	230.0	265.6	313.3	337.7	362.2	402.9	421.0	428.0
12.5°	157.3	176.7	228.7	245.0	296.4	365.9	395.4	422.4	468.7	493.2	496.9
15°	142.2	168.6	238.7	262.5	329.0	409.7	442.3	475.6	518.8	536.3	540.7
17.5°	129.1	162.3	248.2	273.2	354.0	449.3	482.5	510.1	545.1	557.0	560.1
20°	112.8	152.2	254.4	287.0	380.3	478.1	510.1	531.4	555.2	562.6	563.9
22.5°	100.9	141.6	258.2	292.0	397.9	495.6	522.6	539.5	555.7	558.3	558.9
25°	90.9	129.7	257.5	297.7	412.9	506.2	527.0	539.5	548.9	550.1	550.1
27.5°	81.4	116.6	255.0	298.9	424.2	508.7	525.1	533.9	538.3	540.7	540.7
30°	73.3	104.0	248.7	296.4	429.2	506.2	519.4	523.8	528.2	532.0	533.9
32.5°	67.1	92.1	239.4	291.3	429.8	500.0	509.4	511.9	518.2	527.0	530.0
35°	61.4	80.2	228.7	284.5	426.1	490.0	496.2	498.8	511.3	524.4	528.8
37.5°	55.8	71.5	214.9	272.5	420.4	478.1	482.5	486.9	506.2	521.9	527.0
40°	50.2	63.9	198.7	259.4	411.7	463.6	467.5	474.3	500.0	518.2	523.2
42.5°	45.8	57.6	181.1	245.6	400.4	447.4	453.0	463.1	492.5	511.9	517.5
45°	41.9	51.4	162.3	226.8	385.9	430.5	438.6	452.4	483.7	502.5	507.5
47.5°	38.2	47.0	142.9	207.4	370.3	413.6	424.2	439.8	471.9	490.0	494.4
50°	35.1	42.6	123.5	186.7	353.4	395.4	407.9	424.2	456.8	473.7	479.3
52.5°	32.6	38.9	105.3	166.1	334.0	376.6	391.0	407.9	438.6	454.9	458.7
55°	30.1	35.7	89.6	144.1	313.9	356.5	372.2	388.5	418.5	432.3	434.9
57.5°	28.9	33.3	76.4	123.5	292.6	334.0	351.5	366.5	394.7	405.4	407.9
60°	26.9	31.3	66.4	105.9	269.5	312.7	327.7	342.8	366.5	375.3	377.2
62.5°	25.0	30.1	58.9	89.0	245.6	287.6	302.6	316.4	336.4	342.8	345.2
65°	23.8	28.9	53.2	76.4	221.2	261.2	276.3	288.2	304.5	310.7	312.0
67.5°	22.6	27.6	48.8	65.8	196.7	235.0	246.2	257.5	270.0	276.3	276.9
70°	20.6	26.3	45.1	58.3	171.7	204.9	214.3	226.2	236.2	239.4	241.3
72.5°	19.4	24.5	42.6	52.7	146.0	176.1	184.8	191.8	200.5	203.6	203.6
75°	17.6	21.9	40.1	47.0	119.6	144.1	151.6	158.5	165.4	166.6	164.8
77.5°	15.7	19.4	34.5	39.5	93.4	114.0	120.3	124.0	129.7	130.9	131.6
80°	13.2	16.9	26.9	30.7	67.7	84.0	88.4	91.4	96.5	96.5	97.8
82.5°	10.0	13.2	19.4	21.9	45.8	57.6	61.4	63.3	66.4	66.4	66.4
85°	6.3	8.1	12.5	14.4	27.6	35.1	37.6	38.2	40.7	41.4	41.4
87.5°	3.2	4.4	8.1	8.8	14.4	18.2	18.2	19.4	19.4	18.8	18.2
90°	3.9	7.0	10.1	10.8	17.1	25.4	29.5	26.2	19.7	14.8	14.8
92.5°	15.5	41.9	68.4	75.0	105.4	146.0	166.3	145.7	104.6	73.8	70.9
95°	37.3	85.6	134.0	146.1	259.4	410.4	486.0	433.7	329.0	250.6	241.7
97.5°	64.4	107.1	149.8	160.5	349.4	601.3	727.2	694.1	628.0	578.4	561.5
100°	85.5	124.1	162.8	172.5	382.2	661.7	801.5	803.9	808.7	812.3	792.1
102.5°	103.3	139.4	175.5	184.6	397.2	680.7	822.5	864.6	948.9	1012.0	994.7
105°	133.7	164.2	194.7	202.4	408.3	682.8	820.1	914.6	1103.4	1245.1	1235.9
107.5°	164.8	193.2	221.7	228.8	410.4	652.4	773.4	905.2	1168.7	1366.3	1368.6
110°	185.7	211.5	237.1	243.6	407.2	625.5	734.6	881.9	1176.5	1397.4	1407.1

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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	206.3	230.8	255.3	261.4	407.4	602.0	699.3	850.0	1151.4	1377.6	1392.4
115°	237.3	259.9	282.5	288.2	411.1	575.1	657.0	802.2	1092.6	1310.4	1331.0
117.5°	268.1	288.6	309.2	314.3	418.8	558.2	627.8	758.9	1021.0	1217.6	1240.4
120°	285.9	305.2	324.6	329.4	425.0	552.5	616.2	735.9	975.4	1155.0	1177.2
122.5°	303.5	323.0	342.5	347.4	433.9	549.5	607.2	715.0	930.6	1092.4	1114.3
125°	330.3	348.0	365.8	370.2	446.0	547.0	597.5	689.1	872.3	1009.7	1029.8
127.5°	351.9	369.9	387.9	392.4	458.0	545.5	589.4	668.0	825.3	943.2	960.2
130°	363.6	382.9	402.3	407.1	466.8	546.5	586.3	656.3	796.3	901.3	917.0
132.5°	375.7	395.0	414.3	419.2	473.9	547.0	583.5	646.1	771.5	865.5	879.6
135°	393.6	411.1	428.8	433.2	481.8	546.5	578.9	631.4	736.3	815.0	827.2
137.5°	411.8	429.3	446.6	451.0	493.3	549.8	578.1	622.4	711.1	777.7	787.6
140°	426.9	443.0	459.1	463.1	500.5	550.4	575.3	613.6	690.3	747.9	757.1
142.5°	438.6	453.5	468.3	472.0	506.5	552.4	575.3	609.0	676.3	726.8	734.9
145°	456.4	469.4	482.3	485.6	514.3	552.5	571.5	599.1	654.1	695.4	701.4
147.5°	474.4	487.0	499.5	502.7	525.7	556.2	571.5	593.2	636.5	669.0	674.1
150°	486.0	497.4	508.7	511.6	531.6	558.3	571.5	589.8	626.3	653.8	657.8
152.5°	498.0	506.6	515.3	517.4	535.5	559.5	571.5	587.1	618.3	641.8	644.8
155°	515.9	522.3	528.7	530.3	544.1	562.4	571.5	583.9	608.8	627.4	629.4
157.5°	529.1	535.4	541.5	543.1	552.6	565.2	571.5	581.1	600.5	614.9	616.3
160°	538.1	542.9	547.7	548.9	556.5	566.5	571.5	579.8	596.4	608.8	609.6
162.5°	547.0	550.6	554.2	555.2	560.6	567.9	571.5	578.5	592.4	602.9	603.6
165°	556.7	559.9	563.2	564.0	566.6	569.8	571.5	576.6	586.6	594.0	594.9
167.5°	565.6	567.2	568.8	569.2	571.2	573.9	575.3	578.6	585.2	590.1	590.5
170°	571.5	573.0	574.6	575.0	575.1	575.3	575.3	578.6	585.2	590.1	590.1
172.5°	574.6	575.0	575.3	575.3	575.3	575.3	575.3	578.0	583.1	587.0	586.7
175°	578.9	578.9	578.9	578.9	577.7	576.1	575.3	577.0	580.3	582.7	582.7
177.5°	578.9	578.9	578.9	578.9	578.0	576.7	576.1	577.4	580.0	582.0	581.6
180°	578.9	578.9	578.9	578.9	578.9	578.9	578.9	578.9	578.9	578.9	578.9

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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	194.8	194.8
2.5°	208.0	206.8
5°	267.6	268.8
7.5°	360.2	359.7
10°	448.0	453.6
12.5°	511.9	513.1
15°	550.8	553.3
17.5°	565.8	566.5
20°	566.5	565.2
22.5°	559.6	558.3
25°	551.4	550.8
27.5°	543.9	544.5
30°	540.7	542.7
32.5°	540.7	543.9
35°	542.0	545.1
37.5°	541.3	545.1
40°	538.8	543.2
42.5°	532.0	535.1
45°	521.3	525.1
47.5°	507.5	510.1
50°	490.0	492.5
52.5°	468.0	468.7
55°	441.8	444.2
57.5°	413.6	414.1
60°	382.2	384.1
62.5°	349.0	349.0
65°	313.9	315.1
67.5°	277.6	280.7
70°	240.6	241.3
72.5°	204.3	204.3
75°	166.6	167.3
77.5°	130.9	130.9
80°	97.1	97.8
82.5°	67.1	68.3
85°	41.9	41.9
87.5°	19.4	17.6
90°	14.8	14.8
92.5°	59.1	47.4
95°	206.1	170.5
97.5°	493.8	426.2
100°	711.5	630.9
102.5°	925.7	856.7
105°	1198.7	1161.6
107.5°	1377.6	1386.5
110°	1445.7	1484.4

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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	1451.8	1511.2
115°	1413.3	1495.7
117.5°	1331.7	1423.0
120°	1265.9	1354.7
122.5°	1201.9	1289.4
125°	1110.4	1191.1
127.5°	1028.3	1096.3
130°	979.9	1042.7
132.5°	935.9	992.2
135°	875.6	924.2
137.5°	827.4	867.1
140°	794.3	831.4
142.5°	766.8	798.8
145°	725.6	749.8
147.5°	694.1	714.0
150°	674.1	690.3
152.5°	657.1	669.4
155°	637.5	645.7
157.5°	622.1	627.8
160°	612.9	616.2
162.5°	606.8	609.9
165°	598.1	601.4
167.5°	591.8	593.2
170°	590.1	590.1
172.5°	585.5	584.3
175°	582.7	582.7
177.5°	580.3	578.9
180°	578.9	578.9

(END OF REPORT)