

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: P936906

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

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P936906
REPORT IS A COMBINATION OF REPORTS P933471 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-050U-100D-B50-1D-UNV-W2A-W-4
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

Summary

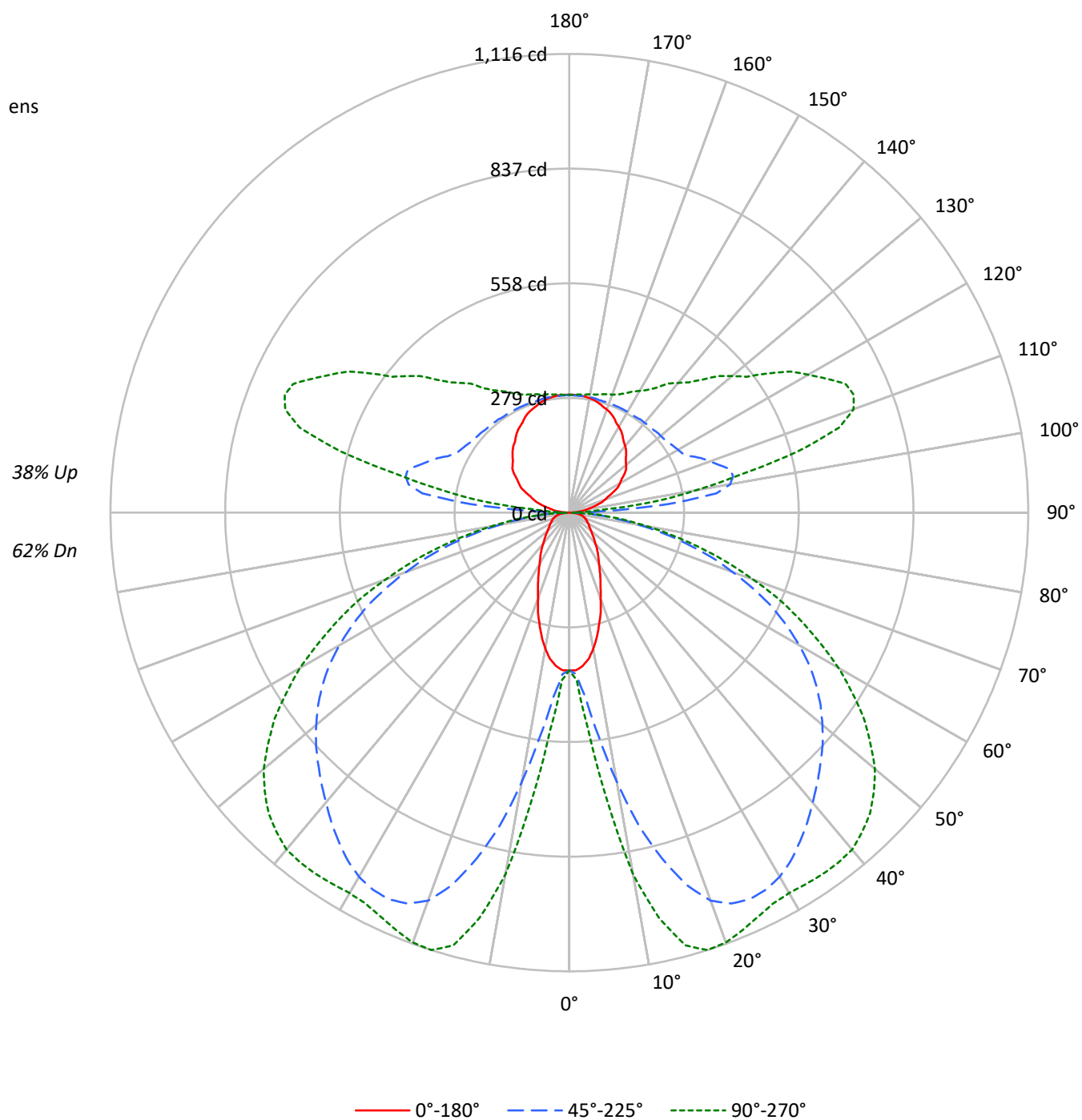
Lumens per Lamp: N/A
Luminaire Lumens: 4829.7 lumens
Efficiency: N/A
Efficacy: 106.9 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

Input Watts (W): 45.2
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				10
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	110	110	110	110	103	103	103	103	90	90	90	78	78	78	67	67	67
1	100	95	91	87	93	89	85	82	78	75	72	67	65	63	58	56	55
2	90	82	75	70	84	77	71	66	67	63	59	58	55	52	50	48	45
3	82	72	64	57	76	67	60	54	59	53	49	51	47	43	44	40	38
4	74	63	54	48	69	59	51	45	52	46	41	45	40	36	39	35	32
5	68	56	47	41	63	52	44	39	46	40	35	40	35	31	34	30	27
6	63	50	41	35	58	47	39	33	41	35	30	36	31	27	31	27	23
7	58	45	36	30	54	42	34	29	37	31	26	32	27	23	28	24	21
8	53	40	32	26	50	38	30	25	34	27	23	29	24	20	25	21	18
9	50	37	29	23	46	35	27	22	31	24	20	27	22	18	23	19	16
10	46	33	26	21	43	32	25	20	28	22	18	25	20	16	21	17	14

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3561	3561	3561
5°	3476	4113	4788
10°	3149	5991	7936
15°	2673	7822	9583
20°	2173	9058	9766
25°	1812	9472	9568
30°	1525	9524	9551
35°	1347	9358	9797
40°	1171	9145	10052
45°	1059	8987	10092
50°	969	8842	9925
55°	925	8635	9485
60°	945	8245	8790
65°	977	7656	7835
70°	1033	6664	6619
75°	1135	5420	5166
80°	1212	3745	3480
85°	1019	1978	1782

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 10092 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	49.6	1.0
10°-20°	220.0	4.6
20°-30°	384.9	8.0
30°-40°	495.5	10.3
40°-50°	553.4	11.5
50°-60°	530.0	11.0
60°-70°	420.1	8.7
70°-80°	247.0	5.1
80°-90°	69.7	1.4
90°-100°	139.8	2.9
100°-110°	367.6	7.6
110°-120°	381.1	7.9
120°-130°	305.7	6.3
130°-140°	239.9	5.0
140°-150°	184.1	3.8
150°-160°	132.6	2.7
160°-170°	81.1	1.7
170°-180°	27.4	0.6
0°-30°	654.6	13.6
0°-40°	1150.0	23.8
0°-60°	2233.5	46.2
0°-90°	2970.3	61.5
90°-120°	888.5	18.4
90°-150°	1618.3	33.5
90°-180°	1859.0	38.5
0°-180°	4829.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	384	384	384	384	384	
5°	374	401	452	511	530	35
15°	280	517	871	1056	1090	78
25°	179	586	1038	1084	1085	82
35°	121	560	977	1033	1074	76
45°	83	447	864	990	1034	64
55°	59	284	733	852	875	54
65°	47	151	544	612	621	47
75°	35	93	299	328	330	36
85°	12	28	74	81	83	13
90°	2	5	15	7	7	2
95°	18	72	241	124	84	21
105°	66	100	406	617	576	70
115°	118	143	326	649	741	116
125°	164	183	296	500	590	145
135°	195	215	287	404	458	151
145°	226	241	283	345	372	142
155°	256	263	283	311	320	117
165°	276	280	283	294	298	78
175°	287	287	285	289	289	27
180°	287	287	287	287	287	

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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	383.8	383.8	383.8	383.8	383.8	383.8	383.8	383.8	383.8	383.8	383.8
2.5°	383.8	383.8	386.3	387.5	389.9	391.3	393.7	396.1	403.6	404.8	407.2
5°	374.0	378.9	394.9	401.1	418.3	441.8	451.7	467.7	501.1	510.9	517.1
7.5°	359.1	370.2	409.7	419.6	462.8	524.5	550.4	585.0	638.0	664.0	684.9
10°	335.7	359.1	429.5	452.9	523.2	617.1	665.2	713.3	793.5	829.3	842.9
12.5°	309.8	348.0	450.5	482.5	583.8	720.8	778.8	831.8	923.2	971.3	978.6
15°	280.1	331.9	470.2	517.1	647.9	807.2	871.3	936.7	1021.9	1056.4	1065.0
17.5°	254.2	319.6	488.7	538.1	697.3	884.9	950.3	1004.6	1073.7	1097.2	1103.3
20°	222.1	299.9	501.1	565.3	749.2	941.7	1004.6	1046.5	1093.4	1108.3	1110.7
22.5°	198.7	278.9	508.5	575.1	783.6	976.2	1029.3	1062.6	1094.6	1099.6	1100.8
25°	179.0	255.4	507.3	586.2	813.3	997.1	1037.9	1062.6	1081.1	1083.5	1083.5
27.5°	160.5	229.6	502.3	588.7	835.5	1002.1	1034.2	1051.5	1060.1	1065.0	1065.0
30°	144.4	204.8	490.0	583.8	845.4	997.1	1023.1	1031.7	1040.4	1047.8	1051.5
32.5°	132.1	181.4	471.5	573.8	846.6	984.8	1003.3	1008.3	1020.6	1037.9	1044.1
35°	121.0	157.9	450.5	560.3	839.2	965.1	977.4	982.4	1007.0	1033.0	1041.6
37.5°	109.8	140.7	423.3	536.9	828.1	941.7	950.3	958.9	997.1	1028.1	1037.9
40°	98.7	125.9	391.3	510.9	810.8	913.3	920.6	934.3	984.8	1020.6	1030.5
42.5°	90.1	113.6	356.7	483.8	788.6	881.1	892.3	912.1	970.1	1008.3	1019.4
45°	82.7	101.2	319.6	446.7	760.2	847.9	863.9	891.0	952.8	989.8	999.7
47.5°	75.3	92.6	281.4	408.5	729.4	814.5	835.5	866.4	929.3	965.1	973.7
50°	69.1	84.0	243.1	367.8	696.0	778.8	803.4	835.5	899.7	933.0	944.1
52.5°	64.2	76.5	207.3	327.1	657.8	741.7	770.1	803.4	863.9	896.0	903.4
55°	59.2	70.3	176.5	283.8	618.3	702.2	733.1	765.1	824.4	851.5	856.5
57.5°	56.8	65.4	150.6	243.1	576.4	657.8	692.4	722.0	777.5	798.5	803.4
60°	53.1	61.7	130.9	208.6	530.7	615.8	645.5	675.1	722.0	739.3	742.9
62.5°	49.4	59.2	116.0	175.2	483.8	566.5	596.1	623.3	662.8	675.1	680.0
65°	46.9	56.8	104.9	150.6	435.6	514.6	544.2	567.7	599.8	612.1	614.6
67.5°	44.5	54.3	96.3	129.5	387.5	462.8	485.0	507.3	531.9	544.2	545.5
70°	40.7	51.8	88.8	114.8	338.1	403.6	422.1	445.5	465.2	471.5	475.1
72.5°	38.3	48.1	84.0	103.7	287.6	346.8	364.1	377.6	394.9	401.1	401.1
75°	34.6	43.2	79.0	92.6	235.7	283.8	298.7	312.2	325.8	328.3	324.6
77.5°	30.8	38.3	67.9	77.7	183.9	224.6	237.0	244.3	255.4	258.0	259.2
80°	25.9	33.3	53.1	60.4	133.3	165.4	174.0	180.2	190.1	190.1	192.5
82.5°	19.7	25.9	38.3	43.2	90.1	113.6	121.0	124.7	130.9	130.9	130.9
85°	12.3	16.1	24.7	28.4	54.3	69.1	74.1	75.3	80.2	81.4	81.4
87.5°	6.2	8.6	16.1	17.3	28.4	35.8	35.8	38.3	38.3	37.0	35.8
90°	2.0	3.5	5.0	5.4	8.5	12.6	14.7	13.0	9.7	7.3	7.3
92.5°	7.7	20.7	33.9	37.2	52.2	72.3	82.4	72.2	51.8	36.6	35.1
95°	18.5	42.4	66.4	72.4	128.5	203.3	240.8	214.8	163.0	124.1	119.7
97.5°	31.9	53.1	74.2	79.5	173.1	297.9	360.3	344.0	311.2	286.6	278.2
100°	42.3	61.5	80.7	85.5	189.3	327.8	397.1	398.4	400.8	402.6	392.6
102.5°	51.2	69.1	87.0	91.4	196.8	337.3	407.5	428.4	470.2	501.5	492.9
105°	66.2	81.4	96.5	100.3	202.3	338.4	406.4	453.2	546.8	617.0	612.4
107.5°	81.6	95.7	109.8	113.4	203.3	323.4	383.3	448.6	579.2	677.1	678.2
110°	92.0	104.7	117.5	120.7	201.8	310.0	364.1	437.0	583.0	692.5	697.2

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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	102.2	114.3	126.5	129.5	201.8	298.3	346.5	421.2	570.6	682.7	690.0
115°	117.6	128.8	140.0	142.8	203.7	284.9	325.5	397.4	541.3	649.3	659.5
117.5°	132.8	143.0	153.2	155.7	207.5	276.6	311.1	376.0	505.9	603.3	614.6
120°	141.7	151.3	160.8	163.3	210.6	273.8	305.3	364.6	483.3	572.4	583.4
122.5°	150.4	160.1	169.7	172.1	215.0	272.3	300.8	354.3	461.2	541.3	552.2
125°	163.6	172.4	181.2	183.4	221.0	271.0	296.1	341.5	432.3	500.3	510.3
127.5°	174.4	183.3	192.2	194.5	227.0	270.4	292.1	331.0	408.9	467.4	475.8
130°	180.2	189.8	199.3	201.7	231.4	270.8	290.5	325.2	394.6	446.6	454.4
132.5°	186.1	195.8	205.3	207.7	234.9	271.0	289.2	320.2	382.3	428.9	435.9
135°	195.0	203.7	212.5	214.6	238.7	270.8	286.8	312.8	364.8	403.9	409.8
137.5°	204.1	212.7	221.4	223.5	244.5	272.4	286.5	308.4	352.4	385.4	390.3
140°	211.6	219.5	227.5	229.5	248.0	272.7	285.1	304.1	342.1	370.6	375.2
142.5°	217.3	224.7	232.0	233.9	251.0	273.7	285.1	301.8	335.1	360.2	364.1
145°	226.2	232.6	239.0	240.6	254.8	273.8	283.2	296.8	324.1	344.6	347.5
147.5°	235.1	241.3	247.5	249.1	260.5	275.6	283.2	293.9	315.4	331.5	334.0
150°	240.8	246.4	252.1	253.5	263.4	276.6	283.2	292.2	310.4	324.0	326.1
152.5°	246.8	251.1	255.4	256.4	265.3	277.2	283.2	290.9	306.4	318.0	319.5
155°	255.6	258.8	262.0	262.7	269.6	278.6	283.2	289.4	301.7	310.9	312.0
157.5°	262.2	265.3	268.3	269.1	273.8	280.0	283.2	288.0	297.6	304.8	305.5
160°	266.7	269.0	271.4	272.0	275.7	280.7	283.2	287.3	295.5	301.7	302.1
162.5°	271.0	272.8	274.6	275.1	277.8	281.4	283.2	286.6	293.6	298.8	299.2
165°	275.9	277.5	279.2	279.5	280.8	282.3	283.2	285.6	290.6	294.3	294.7
167.5°	280.3	281.0	281.8	282.0	283.0	284.4	285.1	286.7	290.0	292.4	292.6
170°	283.2	283.9	284.7	284.9	285.0	285.1	285.1	286.7	290.0	292.4	292.4
172.5°	284.7	284.9	285.1	285.1	285.1	285.1	285.1	286.4	288.9	290.8	290.7
175°	286.8	286.8	286.8	286.8	286.3	285.4	285.1	285.9	287.6	288.8	288.8
177.5°	286.8	286.8	286.8	286.8	286.4	285.8	285.5	286.2	287.5	288.4	288.2
180°	286.8	286.8	286.8	286.8	286.8	286.8	286.8	286.8	286.8	286.8	286.8



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	383.8	383.8
2.5°	409.7	407.2
5°	527.0	529.5
7.5°	709.7	708.3
10°	882.4	893.5
12.5°	1008.3	1010.8
15°	1084.8	1089.7
17.5°	1114.4	1115.7
20°	1115.7	1113.1
22.5°	1102.1	1099.6
25°	1086.1	1084.8
27.5°	1071.2	1072.4
30°	1065.0	1068.8
32.5°	1065.0	1071.2
35°	1067.6	1073.7
37.5°	1066.3	1073.7
40°	1061.4	1070.0
42.5°	1047.8	1053.9
45°	1026.8	1034.2
47.5°	999.7	1004.6
50°	965.1	970.1
52.5°	921.9	923.2
55°	870.0	875.0
57.5°	814.5	815.8
60°	752.8	756.5
62.5°	687.4	687.4
65°	618.3	620.7
67.5°	546.8	552.9
70°	473.9	475.1
72.5°	402.4	402.4
75°	328.3	329.5
77.5°	258.0	258.0
80°	191.3	192.5
82.5°	132.1	134.5
85°	82.7	82.7
87.5°	38.3	34.6
90°	7.3	7.3
92.5°	29.3	23.4
95°	102.1	84.5
97.5°	244.7	211.2
100°	352.6	312.6
102.5°	458.7	424.5
105°	594.0	575.6
107.5°	682.6	687.1
110°	716.4	735.5

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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	719.5	748.9
115°	700.3	741.1
117.5°	659.9	705.2
120°	627.3	671.3
122.5°	595.6	638.9
125°	550.2	590.2
127.5°	509.5	543.2
130°	485.6	516.7
132.5°	463.7	491.7
135°	433.9	457.9
137.5°	409.9	429.6
140°	393.6	412.0
142.5°	380.0	395.8
145°	359.6	371.5
147.5°	343.9	353.8
150°	334.1	342.1
152.5°	325.6	331.7
155°	316.0	320.0
157.5°	308.3	311.1
160°	303.7	305.3
162.5°	300.7	302.2
165°	296.4	298.0
167.5°	293.3	293.9
170°	292.4	292.4
172.5°	290.1	289.5
175°	288.8	288.8
177.5°	287.6	286.8
180°	286.8	286.8

(END OF REPORT)