

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: P937706

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

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P937706
REPORT IS A COMBINATION OF REPORTS P933567 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-100U-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

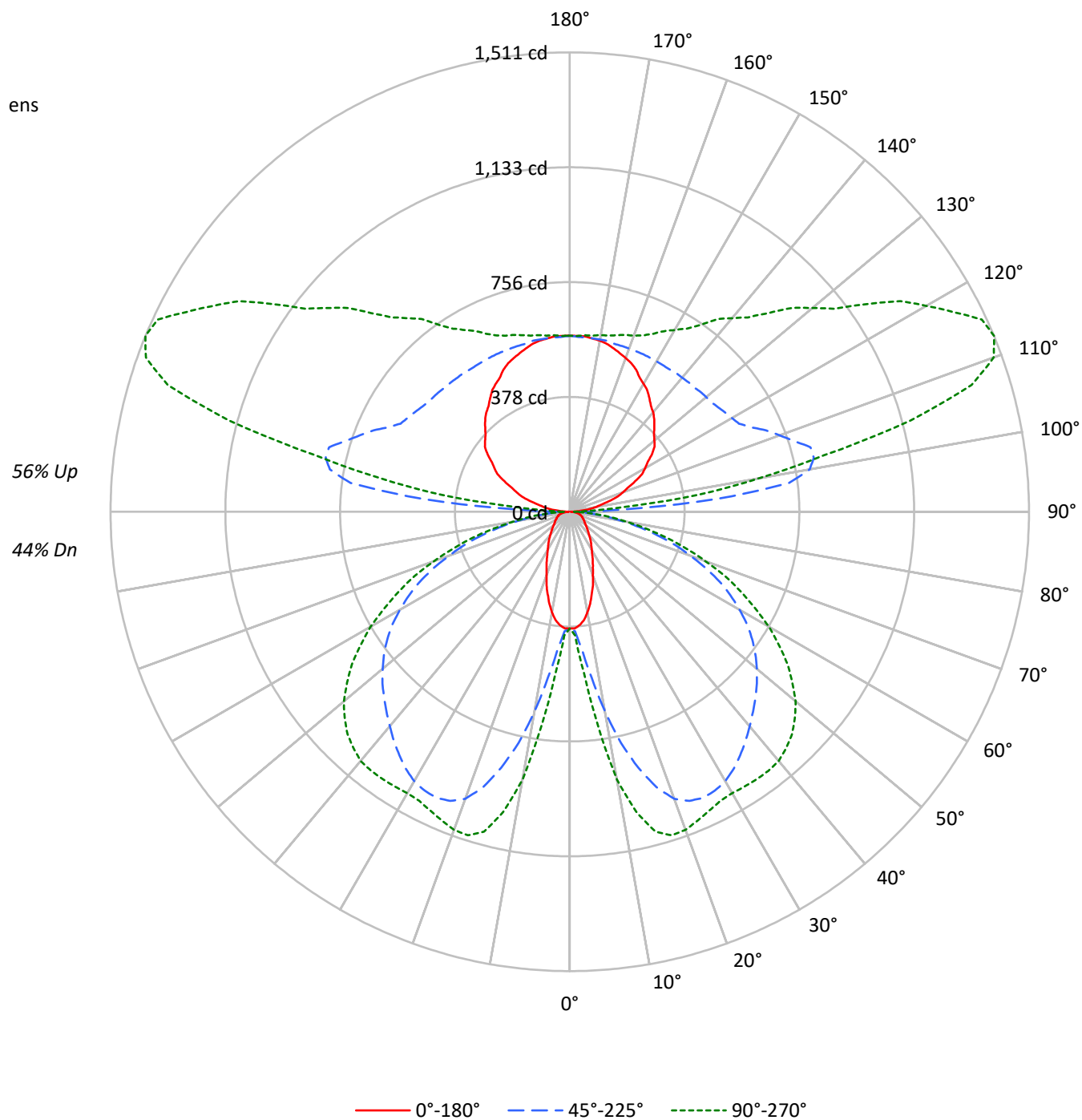
Lumens per Lamp: N/A
Luminaire Lumens: 6723.9 lumens
Efficiency: N/A
Efficacy: 115.9 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 58
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	106	106	106	106	97	97	97	97	80	80	80	65	65	65	51	51	51
1	96	91	87	84	88	84	80	77	69	67	65	56	55	53	44	43	42
2	87	79	73	68	79	73	67	63	60	56	53	49	46	43	38	36	34
3	79	69	62	56	72	63	57	52	53	48	44	43	39	36	33	31	29
4	72	61	53	46	65	56	49	43	46	41	37	38	34	30	29	27	24
5	66	54	46	39	60	49	42	37	41	36	31	33	29	26	26	23	21
6	60	48	40	34	55	44	37	31	37	31	27	30	26	22	24	20	18
7	56	43	35	29	51	40	32	27	33	27	23	27	23	19	21	18	16
8	51	39	31	26	47	36	29	24	30	24	20	25	20	17	19	16	14
9	48	35	28	23	44	33	26	21	27	22	18	22	18	15	18	15	12
10	44	32	25	20	41	30	23	19	25	20	16	21	16	14	16	13	11

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	0.7
10°-20°	220.0	3.3
20°-30°	384.9	5.7
30°-40°	495.5	7.4
40°-50°	553.4	8.2
50°-60°	530.0	7.9
60°-70°	420.1	6.2
70°-80°	247.0	3.7
80°-90°	70.8	1.1
90°-100°	282.1	4.2
100°-110°	741.8	11.0
110°-120°	769.2	11.4
120°-130°	617.0	9.2
130°-140°	484.1	7.2
140°-150°	371.6	5.5
150°-160°	267.6	4.0
160°-170°	163.7	2.4
170°-180°	55.3	0.8
0°-30°	654.6	9.7
0°-40°	1150.0	17.1
0°-60°	2233.5	33.2
0°-90°	2971.4	44.2
90°-120°	1793.2	26.7
90°-150°	3265.8	48.6
90°-180°	3752.0	55.8
0°-180°	6723.9	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°	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°	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°	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°	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°	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)