

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: P937306

Luminaire Tested: SQ4-FB-075U-100D-B50-1D-UNV-W2A-W-4

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P937306
REPORT IS A COMBINATION OF REPORTS P933503 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-075U-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

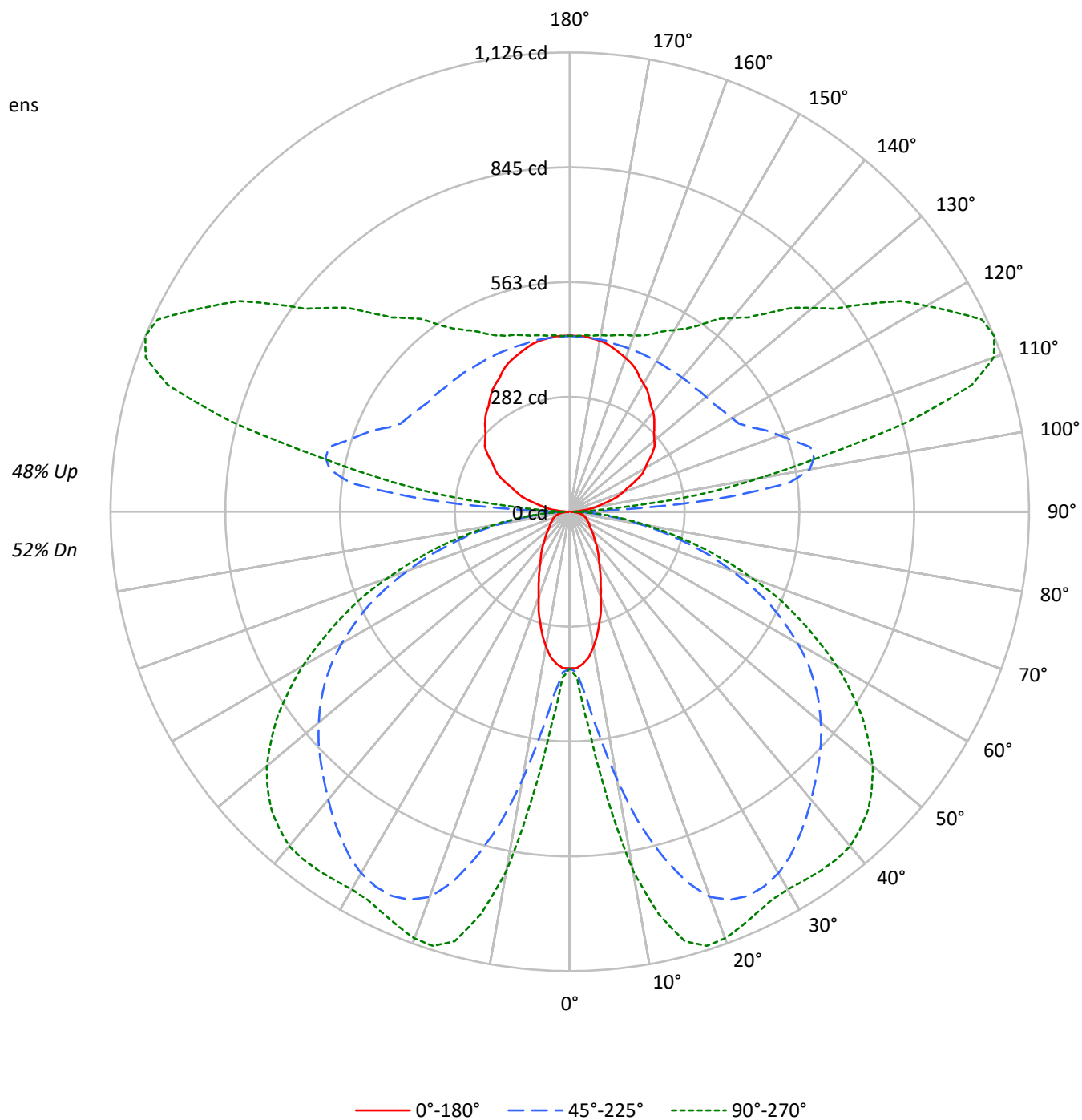
Lumens per Lamp: N/A
Luminaire Lumens: 5767.5 lumens
Efficiency: N/A
Efficacy: 112.6 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 51.2
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	108	108	108	108	99	99	99	99	84	84	84	70	70	70	58	58	58	58	58	58
1	98	93	89	85	90	86	82	79	73	70	68	61	59	57	50	49	47	47	47	42
2	88	80	74	69	81	74	69	64	63	59	55	53	50	47	43	41	39	39	39	34
3	80	70	62	56	74	65	58	53	55	50	46	46	42	39	38	35	32	32	32	28
4	73	62	53	47	67	57	50	44	49	43	38	41	36	33	33	30	27	27	27	24
5	67	55	46	40	61	51	43	37	43	37	33	36	32	28	30	26	23	23	23	20
6	61	49	40	34	56	45	38	32	39	33	28	32	28	24	27	23	20	20	20	17
7	56	44	35	30	52	41	33	28	35	29	24	29	25	21	24	20	18	18	18	15
8	52	39	31	26	48	37	29	24	31	26	21	27	22	19	22	18	16	16	16	13
9	49	36	28	23	45	33	26	22	29	23	19	24	20	16	20	17	14	14	14	12
10	45	33	25	20	42	31	24	19	26	21	17	22	18	15	19	15	12	12	12	10

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	0.9
10°-20°	220.0	3.8
20°-30°	384.9	6.7
30°-40°	495.5	8.6
40°-50°	553.4	9.6
50°-60°	530.0	9.2
60°-70°	420.1	7.3
70°-80°	247.0	4.3
80°-90°	70.3	1.2
90°-100°	210.3	3.6
100°-110°	552.9	9.6
110°-120°	573.3	9.9
120°-130°	459.8	8.0
130°-140°	360.8	6.3
140°-150°	276.9	4.8
150°-160°	199.4	3.5
160°-170°	122.0	2.1
170°-180°	41.2	0.7
0°-30°	654.6	11.3
0°-40°	1150.0	19.9
0°-60°	2233.5	38.7
0°-90°	2970.9	51.5
90°-120°	1336.4	23.2
90°-150°	2433.9	42.2
90°-180°	2797.0	48.5
0°-180°	5767.5	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°	3	8	22	11	11	3
95°	28	109	362	187	127	31
105°	100	151	611	928	866	106
115°	177	215	490	977	1115	175
125°	246	276	445	752	888	219
135°	293	323	431	608	689	227
145°	340	362	426	518	559	213
155°	384	395	426	468	481	177
165°	415	420	426	443	448	117
175°	431	431	429	434	434	41
180°	431	431	431	431	431	

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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°	2.9	5.2	7.6	8.1	12.8	19.0	22.0	19.6	14.7	11.0	11.0
92.5°	11.6	31.3	50.9	55.9	78.5	108.8	123.9	108.6	78.0	55.0	52.9
95°	27.8	63.9	99.9	108.9	193.3	305.9	362.2	323.2	245.2	186.7	180.1
97.5°	48.1	79.9	111.6	119.6	260.4	448.1	542.0	517.3	468.1	431.1	418.5
100°	63.7	92.5	121.3	128.5	284.8	493.2	597.3	599.1	602.7	605.4	590.4
102.5°	77.1	104.0	130.8	137.5	296.0	507.3	613.0	644.4	707.1	754.2	741.3
105°	99.6	122.4	145.1	150.8	304.3	508.9	611.2	681.6	822.4	927.9	921.0
107.5°	122.7	144.0	165.2	170.5	305.9	486.2	576.5	674.6	871.0	1018.2	1019.9
110°	138.4	157.6	176.8	181.6	303.6	466.2	547.5	657.3	876.7	1041.4	1048.6

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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	153.7	172.0	190.3	194.8	303.6	448.7	521.2	633.5	858.2	1026.7	1037.8
115°	176.9	193.7	210.6	214.8	306.4	428.5	489.6	597.9	814.3	976.6	991.9
117.5°	199.8	215.1	230.4	234.2	312.1	415.9	467.8	565.5	760.8	907.4	924.4
120°	213.1	227.5	241.9	245.5	316.7	411.7	459.2	548.4	726.9	860.8	877.3
122.5°	226.1	240.7	255.2	258.8	323.4	409.5	452.5	532.8	693.6	814.2	830.5
125°	246.1	259.4	272.6	275.9	332.4	407.7	445.3	513.6	650.2	752.5	767.6
127.5°	262.4	275.7	289.1	292.4	341.4	406.7	439.3	497.9	615.1	703.0	715.7
130°	271.0	285.4	299.8	303.5	347.9	407.2	436.9	489.1	593.5	671.7	683.4
132.5°	280.0	294.4	308.8	312.4	353.2	407.7	434.9	481.6	575.1	645.1	655.6
135°	293.3	306.4	319.5	322.8	359.0	407.3	431.4	470.5	548.8	607.5	616.5
137.5°	306.9	319.9	332.9	336.1	367.7	409.8	430.9	463.9	530.0	579.6	587.0
140°	318.2	330.2	342.1	345.1	373.0	410.2	428.8	457.4	514.4	557.3	564.2
142.5°	326.9	337.9	348.9	351.7	377.4	411.7	428.8	453.9	504.1	541.7	547.7
145°	340.2	349.9	359.5	361.9	383.2	411.7	425.9	446.5	487.5	518.3	522.8
147.5°	353.5	362.9	372.3	374.6	391.7	414.5	425.9	442.1	474.4	498.6	502.3
150°	362.2	370.7	379.2	381.4	396.2	416.0	425.9	439.5	466.8	487.3	490.3
152.5°	371.2	377.6	384.1	385.6	399.1	416.9	425.9	437.6	460.8	478.3	480.5
155°	384.5	389.3	394.0	395.2	405.4	419.1	425.9	435.2	453.6	467.6	469.1
157.5°	394.3	399.0	403.7	404.8	411.8	421.2	425.9	433.1	447.5	458.3	459.3
160°	401.0	404.6	408.2	409.1	414.7	422.2	425.9	432.1	444.5	453.7	454.3
162.5°	407.7	410.4	413.1	413.8	417.8	423.2	425.9	431.1	441.5	449.3	449.9
165°	414.9	417.3	419.7	420.4	422.3	424.7	425.9	429.6	437.1	442.7	443.4
167.5°	421.5	422.6	423.8	424.1	425.7	427.8	428.8	431.2	436.2	439.8	440.1
170°	425.9	427.0	428.2	428.5	428.6	428.7	428.8	431.2	436.2	439.8	439.8
172.5°	428.2	428.5	428.7	428.8	428.8	428.8	428.8	430.8	434.6	437.5	437.3
175°	431.4	431.4	431.4	431.4	430.6	429.4	428.8	430.0	432.4	434.3	434.3
177.5°	431.4	431.4	431.4	431.4	430.8	429.8	429.4	430.3	432.3	433.7	433.5
180°	431.4	431.4	431.4	431.4	431.4	431.4	431.4	431.4	431.4	431.4	431.4

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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°	11.0	11.0
92.5°	44.1	35.3
95°	153.6	127.1
97.5°	368.1	317.7
100°	530.3	470.2
102.5°	689.9	638.4
105°	893.4	865.7
107.5°	1026.7	1033.4
110°	1077.5	1106.3

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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	1082.0	1126.3
115°	1053.4	1114.7
117.5°	992.5	1060.6
120°	943.4	1009.6
122.5°	895.7	961.0
125°	827.6	887.7
127.5°	766.3	817.1
130°	730.3	777.1
132.5°	697.5	739.4
135°	652.7	688.8
137.5°	616.6	646.2
140°	592.0	619.6
142.5°	571.4	595.2
145°	540.8	558.8
147.5°	517.2	532.2
150°	502.4	514.5
152.5°	489.7	498.8
155°	475.1	481.2
157.5°	463.6	467.8
160°	456.7	459.2
162.5°	452.2	454.6
165°	445.8	448.2
167.5°	441.1	442.2
170°	439.8	439.8
172.5°	436.4	435.4
175°	434.3	434.3
177.5°	432.4	431.4
180°	431.4	431.4

(END OF REPORT)