

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: P936898

Luminaire Tested: SQ4-FB-050U-100D-B35-1D-UNV-W2A-W-4

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P936898
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-B35-1D-UNV-W2A-W-4
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

Summary

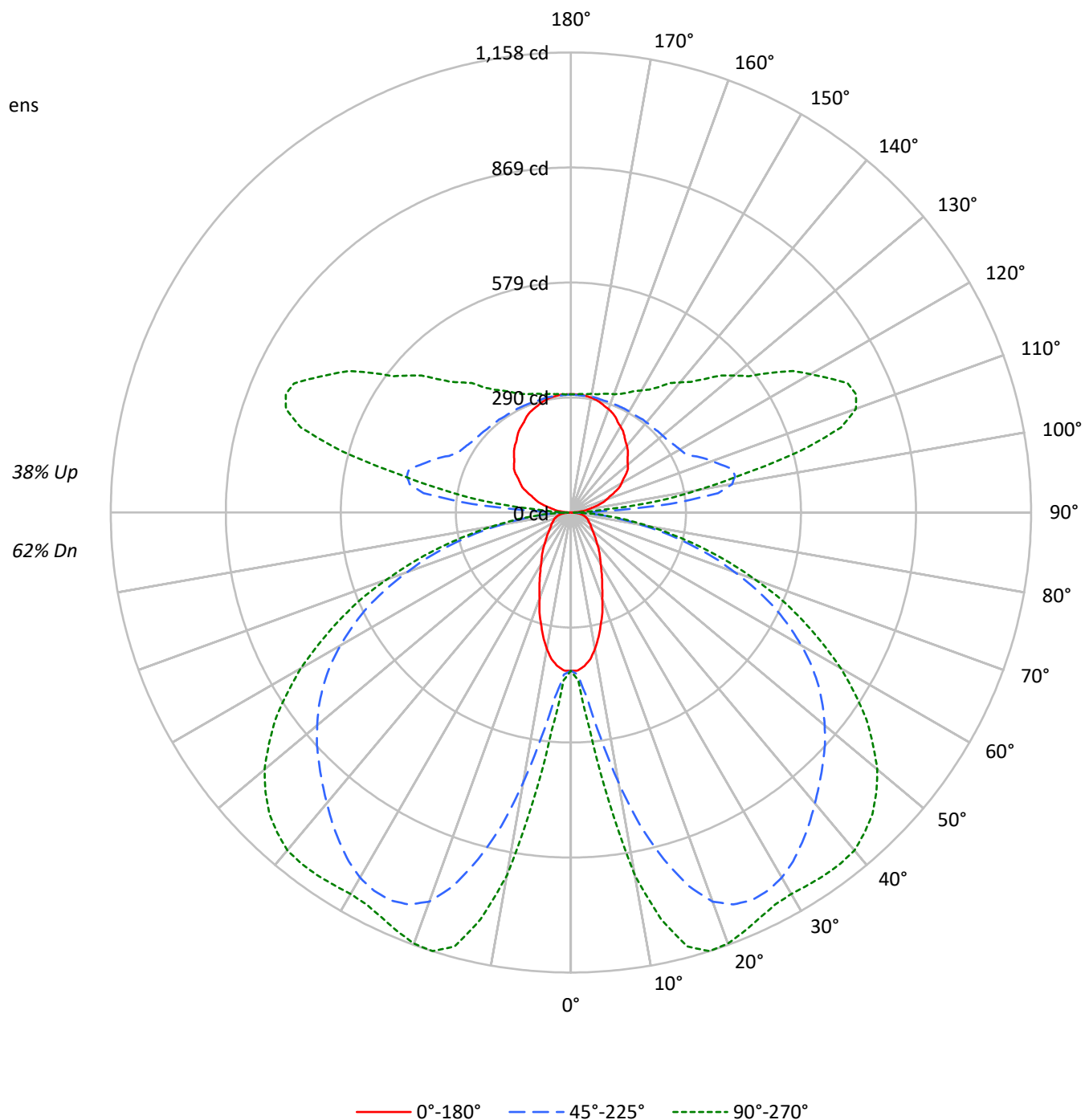
Lumens per Lamp: N/A
Luminaire Lumens: 5010.7 lumens
Efficiency: N/A
Efficacy: 110.9 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

Input Watts (W): 45.2
Input Voltage (V): NR
Input Current (A_{in}): 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



TEST NUMBER: P936898

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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°	3695	3695	3695
5°	3606	4267	4967
10°	3267	6216	8233
15°	2773	8116	9942
20°	2255	9398	10133
25°	1879	9827	9927
30°	1582	9881	9908
35°	1397	9710	10165
40°	1215	9487	10429
45°	1098	9323	10470
50°	1005	9173	10297
55°	959	8959	9840
60°	978	8554	9120
65°	1013	7942	8129
70°	1071	6913	6867
75°	1177	5623	5360
80°	1254	3884	3611
85°	1060	2050	1849

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 10470 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	51.5	1.0
10°-20°	228.3	4.6
20°-30°	399.3	8.0
30°-40°	514.0	10.3
40°-50°	574.2	11.5
50°-60°	549.9	11.0
60°-70°	435.8	8.7
70°-80°	256.3	5.1
80°-90°	72.3	1.4
90°-100°	145.0	2.9
100°-110°	381.4	7.6
110°-120°	395.4	7.9
120°-130°	317.2	6.3
130°-140°	248.9	5.0
140°-150°	191.0	3.8
150°-160°	137.6	2.7
160°-170°	84.2	1.7
170°-180°	28.4	0.6
0°-30°	679.1	13.6
0°-40°	1193.1	23.8
0°-60°	2317.2	46.2
0°-90°	3081.6	61.5
90°-120°	921.8	18.4
90°-150°	1678.9	33.5
90°-180°	1929.0	38.5
0°-180°	5010.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	398	398	398	398	398	
5°	388	416	469	530	549	36
15°	291	536	904	1096	1130	81
25°	186	608	1077	1124	1126	86
35°	126	581	1014	1072	1114	78
45°	86	464	896	1027	1073	66
55°	61	294	761	883	908	56
65°	49	156	565	635	644	48
75°	36	96	310	341	342	38
85°	13	30	77	84	86	14
90°	2	6	15	8	8	3
95°	19	75	250	129	88	21
105°	69	104	422	640	597	73
115°	122	148	338	674	769	120
125°	170	190	307	519	612	151
135°	202	223	298	419	475	157
145°	235	250	294	358	386	147
155°	265	273	294	323	332	122
165°	286	290	294	305	309	81
175°	298	298	296	300	300	28
180°	298	298	298	298	298	

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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	398.2	398.2	398.2	398.2	398.2	398.2	398.2	398.2	398.2	398.2	398.2
2.5°	398.2	398.2	400.8	402.0	404.6	405.9	408.4	411.0	418.7	420.0	422.5
5°	388.0	393.1	409.7	416.1	434.0	458.3	468.6	485.3	519.9	530.0	536.4
7.5°	372.6	384.1	425.1	435.4	480.1	544.2	571.0	606.9	661.9	688.9	710.6
10°	348.3	372.6	445.5	469.9	542.8	640.2	690.1	740.0	823.3	860.4	874.5
12.5°	321.4	361.0	467.3	500.6	605.6	747.8	808.0	863.0	957.8	1007.7	1015.3
15°	290.6	344.4	487.8	536.4	672.2	837.4	904.0	971.8	1060.2	1096.0	1105.0
17.5°	263.8	331.6	507.0	558.2	723.5	918.0	985.9	1042.3	1114.0	1138.3	1144.7
20°	230.4	311.1	519.9	586.4	777.2	976.9	1042.3	1085.8	1134.4	1149.8	1152.3
22.5°	206.1	289.3	527.5	596.6	813.0	1012.8	1067.8	1102.4	1135.7	1140.8	1142.1
25°	185.7	265.0	526.3	608.1	843.8	1034.5	1076.8	1102.4	1121.6	1124.1	1124.1
27.5°	166.5	238.2	521.1	610.8	866.8	1039.6	1073.0	1090.9	1099.8	1105.0	1105.0
30°	149.8	212.5	508.3	605.6	877.0	1034.5	1061.4	1070.4	1079.4	1087.0	1090.9
32.5°	137.0	188.2	489.2	595.4	878.3	1021.7	1040.9	1046.0	1058.8	1076.8	1083.2
35°	125.5	163.9	467.3	581.3	870.6	1001.3	1014.1	1019.2	1044.8	1071.7	1080.6
37.5°	114.0	145.9	439.2	557.0	859.1	976.9	985.9	994.9	1034.5	1066.6	1076.8
40°	102.4	130.6	405.9	530.0	841.2	947.5	955.1	969.3	1021.7	1058.8	1069.1
42.5°	93.5	117.8	370.1	501.9	818.1	914.2	925.7	946.2	1006.4	1046.0	1057.6
45°	85.8	104.9	331.6	463.5	788.7	879.7	896.2	924.4	988.5	1026.8	1037.1
47.5°	78.1	96.0	292.0	423.8	756.7	845.1	866.8	898.8	964.2	1001.3	1010.2
50°	71.7	87.1	252.2	381.6	722.1	808.0	833.5	866.8	933.4	967.9	979.5
52.5°	66.6	79.4	215.1	339.3	682.5	769.5	798.9	833.5	896.2	929.6	937.2
55°	61.4	73.0	183.1	294.5	641.5	728.5	760.6	793.8	855.3	883.4	888.6
57.5°	58.9	67.8	156.2	252.2	598.0	682.5	718.3	749.0	806.6	828.4	833.5
60°	55.0	64.1	135.8	216.4	550.6	638.9	669.7	700.4	749.0	767.0	770.7
62.5°	51.3	61.4	120.3	181.8	501.9	587.7	618.4	646.6	687.6	700.4	705.5
65°	48.6	58.9	108.8	156.2	451.9	533.9	564.6	589.0	622.3	635.1	637.6
67.5°	46.1	56.3	99.9	134.4	402.0	480.1	503.2	526.3	551.8	564.6	565.9
70°	42.2	53.8	92.2	119.1	350.8	418.7	437.9	462.2	482.7	489.2	492.9
72.5°	39.7	49.9	87.1	107.6	298.4	359.8	377.7	391.8	409.7	416.1	416.1
75°	35.9	44.8	82.0	96.0	244.6	294.5	309.9	323.9	338.0	340.6	336.7
77.5°	32.0	39.7	70.4	80.6	190.8	233.0	245.8	253.5	265.0	267.6	268.9
80°	26.8	34.6	55.0	62.7	138.3	171.6	180.5	186.9	197.2	197.2	199.7
82.5°	20.4	26.8	39.7	44.8	93.5	117.8	125.5	129.4	135.8	135.8	135.8
85°	12.8	16.7	25.6	29.5	56.3	71.7	76.8	78.1	83.2	84.5	84.5
87.5°	6.4	8.9	16.7	17.9	29.5	37.1	37.1	39.7	39.7	38.4	37.1
90°	2.0	3.6	5.2	5.6	8.8	13.1	15.2	13.5	10.1	7.6	7.6
92.5°	7.9	21.5	35.2	38.6	54.2	75.0	85.5	74.9	53.8	38.0	36.4
95°	19.2	44.0	68.9	75.1	133.3	211.0	249.8	222.9	169.1	128.8	124.2
97.5°	33.1	55.0	76.9	82.5	179.6	309.1	373.8	356.9	322.9	297.4	288.7
100°	43.9	63.8	83.7	88.7	196.4	340.1	412.0	413.3	415.8	417.6	407.3
102.5°	53.1	71.7	90.2	94.9	204.2	349.9	422.8	444.5	487.8	520.3	511.3
105°	68.7	84.4	100.1	104.1	209.9	351.1	421.6	470.2	567.3	640.1	635.4
107.5°	84.7	99.3	114.0	117.6	211.0	335.5	397.7	465.4	600.9	702.4	703.6
110°	95.4	108.6	121.9	125.2	209.4	321.6	377.7	453.4	604.8	718.4	723.4

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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	106.0	118.6	131.2	134.4	209.4	309.5	359.5	437.0	592.0	708.2	715.9
115°	122.0	133.6	145.3	148.2	211.3	295.5	337.7	412.3	561.6	673.6	684.2
117.5°	137.8	148.4	158.9	161.5	215.3	286.9	322.8	390.1	524.8	625.9	637.6
120°	147.0	157.0	166.9	169.4	218.5	284.0	316.8	378.3	501.5	593.8	605.2
122.5°	156.0	166.1	176.1	178.6	223.1	282.5	312.1	367.5	478.5	561.6	572.9
125°	169.8	178.9	188.0	190.3	229.3	281.2	307.2	354.3	448.5	519.1	529.5
127.5°	180.9	190.2	199.4	201.7	235.5	280.5	303.0	343.4	424.2	484.9	493.6
130°	186.9	196.9	206.8	209.3	240.0	280.9	301.4	337.4	409.4	463.4	471.4
132.5°	193.1	203.1	213.0	215.5	243.7	281.2	300.0	332.2	396.6	445.0	452.2
135°	202.3	211.3	220.4	222.7	247.7	280.9	297.6	324.5	378.5	419.0	425.2
137.5°	211.7	220.6	229.7	231.9	253.7	282.7	297.2	320.0	365.6	399.8	404.9
140°	219.5	227.7	236.0	238.1	257.3	282.9	295.7	315.5	354.9	384.5	389.2
142.5°	225.5	233.1	240.7	242.6	260.4	283.9	295.7	313.1	347.7	373.6	377.7
145°	234.7	241.3	248.0	249.6	264.3	284.0	293.8	307.9	336.2	357.5	360.6
147.5°	243.9	250.4	256.8	258.4	270.3	286.0	293.8	304.9	327.2	343.9	346.5
150°	249.8	255.6	261.5	263.0	273.3	286.9	293.8	303.2	322.0	336.1	338.3
152.5°	256.0	260.5	264.9	266.0	275.3	287.6	293.8	301.8	317.9	329.9	331.5
155°	265.2	268.5	271.8	272.6	279.7	289.1	293.8	300.2	313.0	322.6	323.6
157.5°	272.0	275.2	278.4	279.2	284.0	290.5	293.8	298.7	308.7	316.2	317.0
160°	276.6	279.1	281.6	282.2	286.0	291.2	293.8	298.1	306.6	313.0	313.4
162.5°	281.2	283.0	284.9	285.4	288.2	292.0	293.8	297.4	304.6	310.0	310.4
165°	286.2	287.9	289.6	290.0	291.3	292.9	293.8	296.3	301.5	305.3	305.7
167.5°	290.8	291.6	292.3	292.5	293.6	295.1	295.7	297.5	300.9	303.4	303.6
170°	293.8	294.6	295.4	295.5	295.6	295.7	295.7	297.5	300.9	303.4	303.4
172.5°	295.4	295.5	295.7	295.7	295.7	295.7	295.7	297.1	299.7	301.7	301.6
175°	297.6	297.6	297.6	297.6	297.0	296.1	295.7	296.6	298.4	299.6	299.6
177.5°	297.6	297.6	297.6	297.6	297.1	296.5	296.2	296.9	298.3	299.2	299.0
180°	297.6	297.6	297.6	297.6	297.6	297.6	297.6	297.6	297.6	297.6	297.6

TEST NUMBER: P936898

CATALOG NUMBER: SQ4-FB-050U-100D-B35-1D-UNV-W2A-W-4

CANDELA DISTRIBUTION (continued):

	80°	90°
0°	398.2	398.2
2.5°	425.1	422.5
5°	546.7	549.3
7.5°	736.2	734.9
10°	915.5	926.9
12.5°	1046.0	1048.7
15°	1125.5	1130.5
17.5°	1156.2	1157.5
20°	1157.5	1154.9
22.5°	1143.4	1140.8
25°	1126.8	1125.5
27.5°	1111.3	1112.6
30°	1105.0	1108.8
32.5°	1105.0	1111.3
35°	1107.6	1114.0
37.5°	1106.2	1114.0
40°	1101.2	1110.1
42.5°	1087.0	1093.4
45°	1065.3	1073.0
47.5°	1037.1	1042.3
50°	1001.3	1006.4
52.5°	956.4	957.8
55°	902.6	907.8
57.5°	845.1	846.3
60°	781.0	784.9
62.5°	713.2	713.2
65°	641.5	644.0
67.5°	567.3	573.6
70°	491.7	492.9
72.5°	417.4	417.4
75°	340.6	341.9
77.5°	267.6	267.6
80°	198.5	199.7
82.5°	137.0	139.5
85°	85.8	85.8
87.5°	39.7	35.9
90°	7.6	7.6
92.5°	30.4	24.3
95°	105.9	87.7
97.5°	253.9	219.1
100°	365.8	324.3
102.5°	475.9	440.4
105°	616.3	597.2
107.5°	708.1	712.8
110°	743.2	763.1

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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	746.4	776.9
115°	726.6	768.9
117.5°	684.6	731.6
120°	650.8	696.4
122.5°	617.9	662.9
125°	570.8	612.3
127.5°	528.6	563.6
130°	503.8	536.1
132.5°	481.1	510.1
135°	450.2	475.1
137.5°	425.3	445.7
140°	408.3	427.4
142.5°	394.2	410.7
145°	373.1	385.5
147.5°	356.8	367.1
150°	346.6	354.9
152.5°	337.8	344.1
155°	327.8	332.0
157.5°	319.9	322.8
160°	315.1	316.8
162.5°	312.0	313.6
165°	307.5	309.2
167.5°	304.3	304.9
170°	303.4	303.4
172.5°	301.0	300.4
175°	299.6	299.6
177.5°	298.4	297.6
180°	297.6	297.6

(END OF REPORT)