

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: P936703

Luminaire Tested: SQ4-FB-050U-050D-B40-1D-UNV-W2A-W-6

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P936703
REPORT IS A COMBINATION OF REPORTS P933477 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-050U-050D-B40-1D-UNV-W2A-W-6
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

Summary

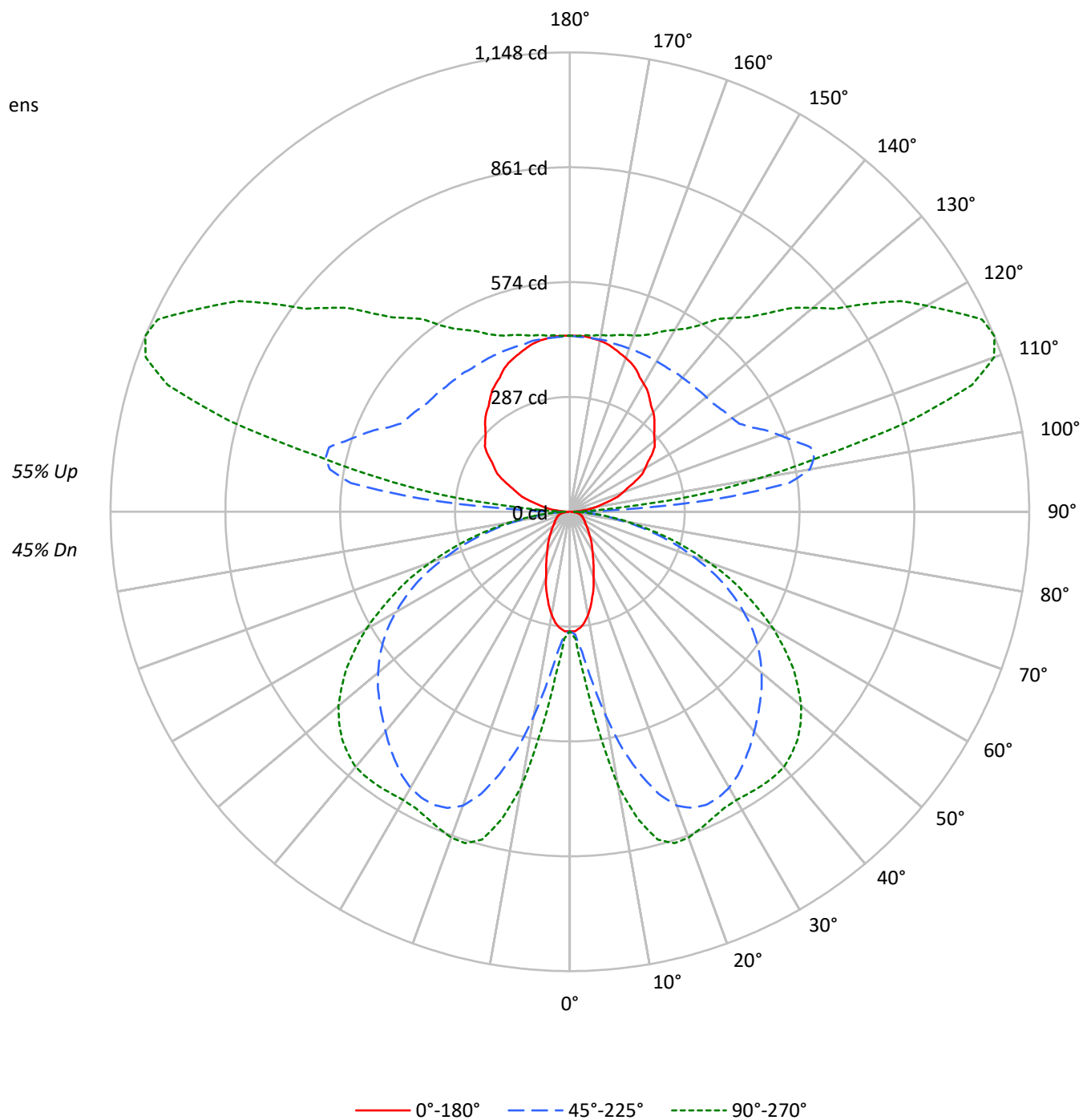
Lumens per Lamp: N/A
Luminaire Lumens: 5164.6 lumens
Efficiency: N/A
Efficacy: 121.2 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 6' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 42.6
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

TEST NUMBER: P936703

CATALOG NUMBER: SQ4-FB-050U-050D-B40-1D-UNV-W2A-W-6

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	92	88	84	88	84	81	77	70	67	65	57	55	53	45	43	42
2	87	79	73	68	79	73	67	63	60	56	53	49	46	44	39	37	35
3	79	69	62	56	72	64	57	52	53	48	44	43	39	36	34	31	29
4	72	61	53	47	66	56	49	43	47	41	37	38	34	31	30	27	24
5	66	54	46	39	60	50	42	37	41	36	31	34	29	26	26	23	21
6	60	48	40	34	55	44	37	31	37	31	27	30	26	22	24	21	18
7	56	43	35	29	51	40	32	27	33	28	23	27	23	20	21	18	16
8	51	39	31	26	47	36	29	24	30	25	21	25	20	17	20	16	14
9	48	35	28	23	44	33	26	21	27	22	18	23	18	15	18	15	12
10	45	32	25	20	41	30	23	19	25	20	16	21	17	14	17	13	11

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1848	1848	1848
5°	1805	2135	2484
10°	1637	3112	4118
15°	1390	4064	4973
20°	1132	4710	5068
25°	943	4927	4965
30°	795	4957	4956
35°	703	4873	5084
40°	612	4765	5217
45°	554	4685	5237
50°	508	4613	5150
55°	486	4508	4922
60°	498	4308	4562
65°	516	4005	4065
70°	548	3490	3436
75°	605	2843	2681
80°	657	1969	1806
85°	572	1044	925

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 5237 cd/sqm

TEST NUMBER: P936703

CATALOG NUMBER: SQ4-FB-050U-050D-B40-1D-UNV-W2A-W-6

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	38.6	0.7
10°-20°	171.3	3.3
20°-30°	299.6	5.8
30°-40°	385.6	7.5
40°-50°	430.7	8.3
50°-60°	412.6	8.0
60°-70°	327.0	6.3
70°-80°	192.3	3.7
80°-90°	55.1	1.1
90°-100°	214.4	4.2
100°-110°	563.8	10.9
110°-120°	584.6	11.3
120°-130°	468.9	9.1
130°-140°	367.9	7.1
140°-150°	282.4	5.5
150°-160°	203.4	3.9
160°-170°	124.4	2.4
170°-180°	42.0	0.8
0°-30°	509.5	9.9
0°-40°	895.1	17.3
0°-60°	1738.5	33.7
0°-90°	2312.8	44.8
90°-120°	1362.8	26.4
90°-150°	2482.0	48.1
90°-180°	2852.0	55.2
0°-180°	5164.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	299	299	299	299	299	
5°	291	312	352	398	412	27
15°	218	402	678	822	848	61
25°	139	456	808	843	844	64
35°	94	436	761	804	836	59
45°	64	348	672	770	805	50
55°	46	221	571	663	681	42
65°	36	117	424	476	483	36
75°	27	72	232	256	256	28
85°	10	22	58	63	64	10
90°	3	8	22	11	11	3
95°	28	111	369	190	130	31
105°	102	154	623	946	883	108
115°	180	219	499	996	1137	178
125°	251	281	454	767	905	223
135°	299	329	440	619	702	231
145°	347	369	434	528	570	217
155°	392	403	434	477	491	180
165°	423	429	434	451	457	119
175°	440	440	437	443	443	42
180°	440	440	440	440	440	

TEST NUMBER: P936703

CATALOG NUMBER: SQ4-FB-050U-050D-B40-1D-UNV-W2A-W-6

CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	298.7	298.7	298.7	298.7	298.7	298.7	298.7	298.7	298.7	298.7	298.7
2.5°	298.7	298.7	300.6	301.6	303.6	304.5	306.5	308.4	314.1	315.1	317.0
5°	291.1	294.9	307.4	312.2	325.7	343.9	351.5	364.0	390.0	397.7	402.5
7.5°	279.5	288.2	318.9	326.6	360.2	408.3	428.4	455.3	496.6	516.8	533.2
10°	261.3	279.5	334.2	352.6	407.3	480.3	517.8	555.2	617.7	645.5	656.1
12.5°	241.1	270.9	350.6	375.6	454.4	561.0	606.1	647.5	718.5	756.0	761.7
15°	218.0	258.4	366.0	402.5	504.3	628.2	678.1	729.1	795.4	822.3	829.0
17.5°	197.9	248.8	380.4	418.9	542.7	688.7	739.6	782.0	835.7	854.0	858.7
20°	173.0	233.4	390.0	440.0	583.1	733.0	782.0	814.6	851.1	862.7	864.6
22.5°	154.6	217.1	395.8	447.6	610.0	759.8	801.1	827.0	852.1	855.9	856.8
25°	139.3	198.8	394.8	456.3	633.1	776.1	807.8	827.0	841.5	843.4	843.4
27.5°	124.9	178.7	391.0	458.2	650.4	780.0	805.0	818.4	825.1	829.0	829.0
30°	112.4	159.5	381.3	454.4	658.0	776.1	796.4	803.1	809.7	815.6	818.4
32.5°	102.8	141.2	366.9	446.7	658.9	766.6	781.0	784.8	794.4	807.8	812.7
35°	94.2	123.0	350.6	436.1	653.2	751.2	760.8	764.7	783.9	804.0	810.7
37.5°	85.5	109.5	329.5	417.9	644.5	733.0	739.6	746.4	776.1	800.2	807.8
40°	76.9	98.0	304.5	397.7	631.2	710.8	716.6	727.1	766.6	794.4	802.1
42.5°	70.1	88.3	277.6	376.6	613.8	685.9	694.5	709.9	755.0	784.8	793.4
45°	64.4	78.8	248.8	347.7	591.7	659.9	672.4	693.5	741.6	770.4	778.0
47.5°	58.6	72.0	219.0	317.9	567.7	634.0	650.4	674.3	723.3	751.2	757.9
50°	53.8	65.3	189.3	286.2	541.8	606.1	625.3	650.4	700.3	726.2	734.9
52.5°	49.9	59.6	161.4	254.6	512.0	577.3	599.5	625.3	672.4	697.4	703.2
55°	46.1	54.7	137.3	220.9	481.2	546.5	570.6	595.5	641.7	662.8	666.7
57.5°	44.2	50.9	117.2	189.3	448.6	512.0	538.9	561.9	605.2	621.5	625.3
60°	41.4	48.0	101.8	162.4	413.0	479.3	502.4	525.4	561.9	575.4	578.3
62.5°	38.4	46.1	90.3	136.4	376.6	440.9	463.9	485.1	515.8	525.4	529.3
65°	36.5	44.2	81.7	117.2	339.1	400.5	423.6	441.9	466.8	476.4	478.4
67.5°	34.6	42.3	75.0	100.8	301.6	360.2	377.5	394.8	414.0	423.6	424.6
70°	31.7	40.3	69.1	89.3	263.2	314.1	328.5	346.8	362.1	366.9	369.9
72.5°	29.8	37.4	65.3	80.7	223.9	269.9	283.3	293.9	307.4	312.2	312.2
75°	26.9	33.6	61.5	72.0	183.5	220.9	232.4	243.0	253.6	255.6	252.6
77.5°	24.0	29.8	52.8	60.5	143.2	174.9	184.4	190.2	198.8	200.7	201.7
80°	20.2	26.0	41.4	47.1	103.7	128.7	135.4	140.3	147.9	147.9	149.8
82.5°	15.4	20.2	29.8	33.6	70.1	88.3	94.2	97.0	101.8	101.8	101.8
85°	9.6	12.5	19.2	22.1	42.3	53.8	57.7	58.6	62.5	63.4	63.4
87.5°	4.8	6.7	12.5	13.5	22.1	27.9	27.9	29.8	29.8	28.8	27.9
90°	3.0	5.3	7.7	8.3	13.0	19.3	22.4	20.0	14.9	11.2	11.2
92.5°	11.8	31.9	52.0	57.0	80.1	111.0	126.3	110.7	79.5	56.1	53.9
95°	28.4	65.0	101.8	111.0	197.1	312.0	369.4	329.7	250.1	190.4	183.6
97.5°	49.0	81.5	113.8	122.0	265.6	457.1	552.8	527.6	477.3	439.6	426.7
100°	64.9	94.4	123.8	131.1	290.4	502.9	609.1	610.9	614.6	617.4	602.1
102.5°	78.5	106.0	133.4	140.3	301.9	517.3	625.0	657.0	721.1	769.2	756.1
105°	101.6	124.8	148.0	153.9	310.3	518.9	623.2	695.0	838.6	946.3	939.2
107.5°	125.2	146.9	168.5	173.9	311.9	495.8	587.8	687.9	888.2	1038.4	1040.1
110°	141.1	160.6	180.2	185.1	309.5	475.4	558.3	670.2	894.2	1062.1	1069.4

TEST NUMBER: P936703

CATALOG NUMBER: SQ4-FB-050U-050D-B40-1D-UNV-W2A-W-6

CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	156.8	175.4	194.1	198.7	309.6	457.5	531.5	646.1	875.2	1047.0	1058.2
115°	180.4	197.6	214.8	219.1	312.5	437.0	499.3	609.7	830.4	995.9	1011.5
117.5°	203.7	219.4	234.9	238.8	318.3	424.2	477.1	576.7	775.9	925.3	942.7
120°	217.3	232.0	246.7	250.4	323.0	419.8	468.2	559.2	741.3	877.7	894.6
122.5°	230.6	245.4	260.2	264.0	329.8	417.5	461.5	543.4	707.4	830.3	846.9
125°	251.0	264.4	278.0	281.3	338.9	415.7	454.1	523.7	663.0	767.3	782.6
127.5°	267.5	281.2	294.8	298.2	348.1	414.7	447.9	507.7	627.1	716.8	729.7
130°	276.4	291.1	305.8	309.4	354.8	415.2	445.5	498.7	605.2	685.0	697.0
132.5°	285.5	300.3	315.0	318.6	360.2	415.7	443.5	491.2	586.4	657.8	668.5
135°	299.1	312.5	325.8	329.2	366.1	415.3	440.0	479.9	559.6	619.4	628.7
137.5°	313.0	326.2	339.4	342.7	374.9	417.8	439.3	473.0	540.4	591.0	598.6
140°	324.5	336.7	348.9	351.9	380.4	418.3	437.3	466.4	524.7	568.3	575.4
142.5°	333.3	344.6	355.8	358.7	384.9	419.8	437.3	462.9	514.0	552.4	558.5
145°	347.0	356.8	366.6	369.1	390.9	419.8	434.3	455.2	497.1	528.5	533.1
147.5°	360.5	370.1	379.7	382.1	399.5	422.7	434.3	450.8	483.7	508.4	512.3
150°	369.4	378.1	386.7	388.9	404.1	424.2	434.3	448.3	476.1	496.9	499.9
152.5°	378.5	385.1	391.6	393.3	406.9	425.2	434.3	446.2	470.0	487.7	490.0
155°	392.1	397.0	401.8	403.0	413.4	427.4	434.3	443.8	462.7	476.8	478.4
157.5°	402.2	406.8	411.6	412.8	419.9	429.6	434.3	441.7	456.4	467.4	468.4
160°	408.9	412.6	416.2	417.1	422.9	430.5	434.3	440.6	453.2	462.7	463.3
162.5°	415.7	418.5	421.3	421.9	426.0	431.6	434.3	439.7	450.3	458.2	458.8
165°	423.1	425.5	428.0	428.7	430.6	433.1	434.3	438.2	445.7	451.4	452.1
167.5°	429.8	431.0	432.2	432.5	434.1	436.2	437.3	439.8	444.7	448.5	448.8
170°	434.3	435.5	436.7	437.0	437.1	437.2	437.3	439.8	444.7	448.5	448.5
172.5°	436.7	437.0	437.2	437.3	437.3	437.3	437.3	439.2	443.1	446.1	445.9
175°	440.0	440.0	440.0	440.0	439.1	437.9	437.3	438.5	441.0	442.8	442.8
177.5°	440.0	440.0	440.0	440.0	439.3	438.3	437.9	438.8	440.8	442.3	442.0
180°	440.0	440.0	440.0	440.0	440.0	440.0	440.0	440.0	440.0	440.0	440.0

TEST NUMBER: P936703

CATALOG NUMBER: SQ4-FB-050U-050D-B40-1D-UNV-W2A-W-6

CANDELA DISTRIBUTION (continued):

	80°	90°
0°	298.7	298.7
2.5°	318.9	317.0
5°	410.2	412.1
7.5°	552.4	551.4
10°	686.8	695.4
12.5°	784.8	786.7
15°	844.4	848.2
17.5°	867.4	868.4
20°	868.4	866.5
22.5°	857.8	855.9
25°	845.4	844.4
27.5°	833.8	834.8
30°	829.0	831.9
32.5°	829.0	833.8
35°	830.9	835.7
37.5°	830.0	835.7
40°	826.1	832.9
42.5°	815.6	820.3
45°	799.2	805.0
47.5°	778.0	782.0
50°	751.2	755.0
52.5°	717.6	718.5
55°	677.2	681.1
57.5°	634.0	635.0
60°	586.0	588.9
62.5°	535.1	535.1
65°	481.2	483.1
67.5°	425.5	430.3
70°	368.9	369.9
72.5°	313.1	313.1
75°	255.6	256.5
77.5°	200.7	200.7
80°	148.9	149.8
82.5°	102.8	104.7
85°	64.4	64.4
87.5°	29.8	26.9
90°	11.2	11.2
92.5°	44.9	36.0
95°	156.6	129.6
97.5°	375.3	323.9
100°	540.8	479.5
102.5°	703.5	651.0
105°	911.1	882.8
107.5°	1046.9	1053.7
110°	1098.7	1128.1

TEST NUMBER: P936703

CATALOG NUMBER: SQ4-FB-050U-050D-B40-1D-UNV-W2A-W-6

CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	1103.4	1148.5
115°	1074.1	1136.7
117.5°	1012.1	1081.5
120°	962.1	1029.6
122.5°	913.5	979.9
125°	843.9	905.2
127.5°	781.5	833.2
130°	744.7	792.5
132.5°	711.3	754.1
135°	665.5	702.4
137.5°	628.9	659.0
140°	603.6	631.8
142.5°	582.7	607.0
145°	551.5	569.8
147.5°	527.4	542.6
150°	512.4	524.7
152.5°	499.4	508.7
155°	484.6	490.7
157.5°	472.8	477.1
160°	465.8	468.2
162.5°	461.2	463.6
165°	454.6	457.1
167.5°	449.8	450.9
170°	448.5	448.5
172.5°	444.9	444.1
175°	442.8	442.8
177.5°	441.0	440.0
180°	440.0	440.0

(END OF REPORT)