

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: P936702

Luminaire Tested: SQ4-FB-050U-050D-B40-1D-UNV-W2A-W-4

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P936702
REPORT IS A COMBINATION OF REPORTS P933469 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-4
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

Summary

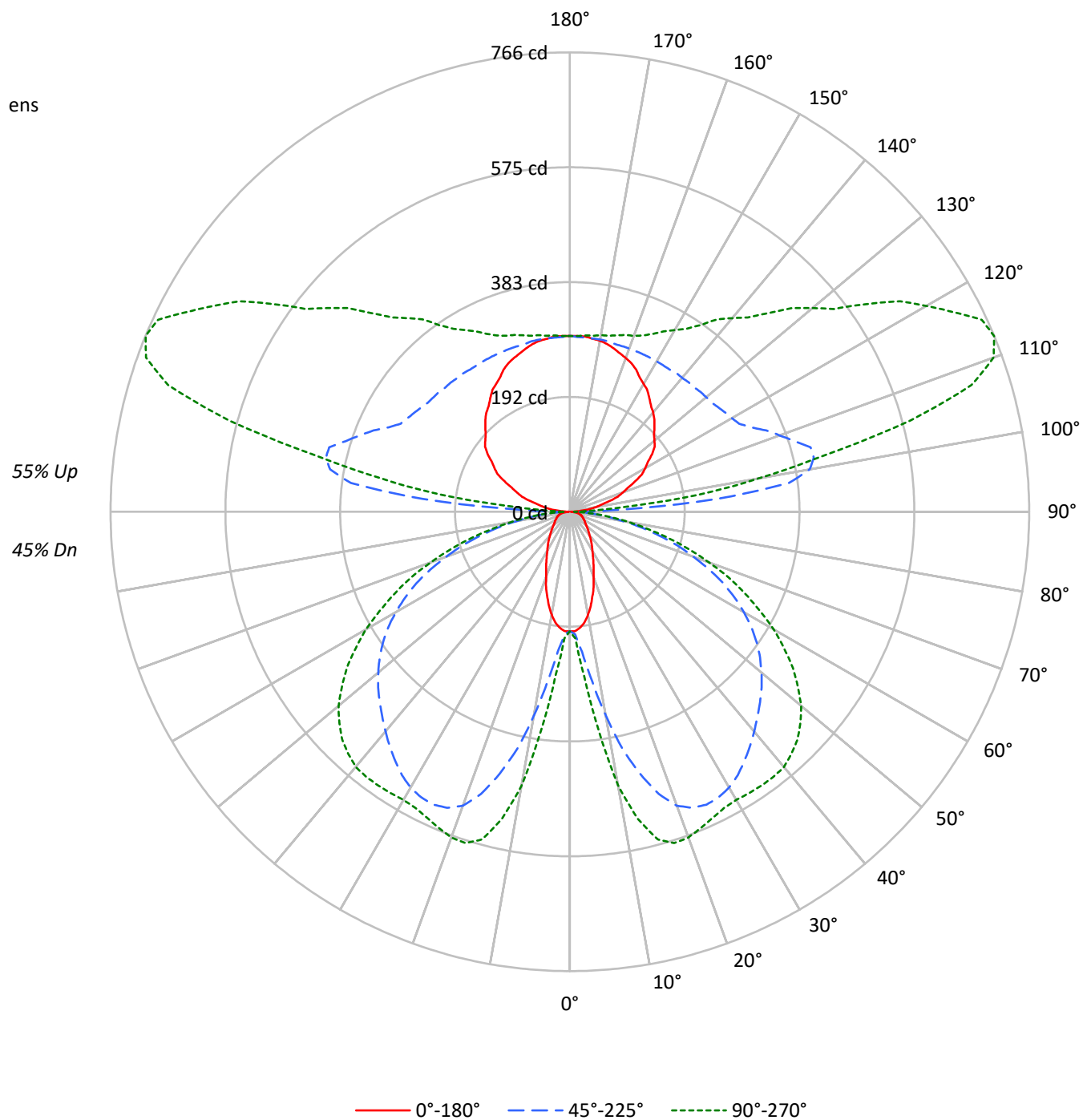
Lumens per Lamp: N/A
Luminaire Lumens: 3443.7 lumens
Efficiency: N/A
Efficacy: 121.3 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 28.4
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
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	25
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	2485
10°	1635	3110	4120
15°	1388	4061	4975
20°	1129	4702	5070
25°	940	4917	4968
30°	792	4944	4958
35°	698	4858	5085
40°	609	4748	5218
45°	549	4666	5239
50°	503	4589	5153
55°	481	4483	4923
60°	489	4280	4563
65°	508	3974	4067
70°	536	3459	3437
75°	590	2812	2681
80°	632	1943	1808
85°	530	1028	924

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 5239 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	25.8	0.7
10°-20°	114.2	3.3
20°-30°	199.8	5.8
30°-40°	257.2	7.5
40°-50°	287.3	8.3
50°-60°	275.2	8.0
60°-70°	218.1	6.3
70°-80°	128.2	3.7
80°-90°	36.7	1.1
90°-100°	142.9	4.2
100°-110°	375.9	10.9
110°-120°	389.7	11.3
120°-130°	312.6	9.1
130°-140°	245.3	7.1
140°-150°	188.3	5.5
150°-160°	135.6	3.9
160°-170°	83.0	2.4
170°-180°	28.0	0.8
0°-30°	339.8	9.9
0°-40°	597.0	17.3
0°-60°	1159.5	33.7
0°-90°	1542.5	44.8
90°-120°	908.5	26.4
90°-150°	1654.7	48.0
90°-180°	1901.0	55.2
0°-180°	3443.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	199	199	199	199	199	
5°	194	208	234	265	275	18
15°	145	268	452	548	566	40
25°	93	304	539	562	563	43
35°	63	291	507	536	557	39
45°	43	232	448	514	537	33
55°	31	147	381	442	454	28
65°	24	78	282	318	322	24
75°	18	48	155	170	171	19
85°	6	15	38	42	43	7
90°	2	6	15	7	7	2
95°	19	74	246	127	86	21
105°	68	103	416	631	589	72
115°	120	146	333	664	758	119
125°	167	188	303	512	604	149
135°	199	220	293	413	468	154
145°	231	246	290	352	380	145
155°	261	269	290	318	327	120
165°	282	286	290	301	305	80
175°	293	293	292	295	295	28
180°	293	293	293	293	293	

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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	199.2	199.2	199.2	199.2	199.2	199.2	199.2	199.2	199.2	199.2	199.2
2.5°	199.2	199.2	200.5	201.1	202.5	203.1	204.4	205.6	209.5	210.1	211.4
5°	194.2	196.7	205.0	208.2	217.2	229.4	234.5	242.9	260.1	265.2	268.5
7.5°	186.4	192.2	212.7	217.8	240.3	272.3	285.7	303.7	331.2	344.7	355.5
10°	174.3	186.4	223.0	235.1	271.6	320.3	345.3	370.3	412.0	430.5	437.6
12.5°	160.8	180.7	233.9	250.5	303.0	374.2	404.3	431.9	479.2	504.2	508.1
15°	145.4	172.4	244.1	268.5	336.4	419.0	452.3	486.3	530.5	548.4	552.8
17.5°	132.0	166.0	253.7	279.3	361.9	459.4	493.4	521.5	557.3	569.6	572.7
20°	115.4	155.7	260.1	293.5	388.9	488.9	521.5	543.3	567.7	575.3	576.6
22.5°	103.1	144.8	264.0	298.5	406.8	506.7	534.3	551.6	568.2	570.8	571.5
25°	92.9	132.6	263.3	304.4	422.2	517.6	538.8	551.6	561.3	562.5	562.5
27.5°	83.3	119.2	260.7	305.6	433.8	520.2	536.9	545.9	550.4	552.8	552.8
30°	75.0	106.4	254.3	303.0	438.8	517.6	531.1	535.6	540.1	544.0	545.9
32.5°	68.6	94.2	244.8	297.9	439.5	511.2	520.9	523.4	529.8	538.8	542.0
35°	62.7	82.0	233.9	290.9	435.7	501.0	507.4	510.0	522.8	536.2	540.7
37.5°	57.0	73.1	219.7	278.7	429.8	488.9	493.4	497.8	517.6	533.7	538.8
40°	51.3	65.3	203.1	265.2	421.0	474.1	478.0	484.9	511.2	529.8	535.0
42.5°	46.8	58.9	185.2	251.2	409.4	457.4	463.2	473.5	503.6	523.4	529.2
45°	42.9	52.5	166.0	231.9	394.6	440.2	448.5	462.6	494.6	513.8	518.9
47.5°	39.1	48.0	146.1	212.1	378.7	422.9	433.8	449.7	482.5	501.0	505.5
50°	35.9	43.5	126.3	190.9	361.4	404.3	417.0	433.8	467.1	484.4	490.1
52.5°	33.3	39.7	107.6	169.8	341.5	385.1	399.8	417.0	448.5	465.1	469.0
55°	30.8	36.5	91.6	147.4	321.0	364.5	380.6	397.2	427.9	442.1	444.6
57.5°	29.5	34.0	78.1	126.3	299.2	341.5	359.4	374.7	403.6	414.5	417.0
60°	27.5	32.0	67.9	108.3	275.5	319.7	335.1	350.5	374.7	383.7	385.7
62.5°	25.6	30.8	60.3	91.0	251.2	294.0	309.4	323.6	344.0	350.5	353.0
65°	24.4	29.5	54.4	78.1	226.1	267.1	282.5	294.7	311.3	317.7	319.1
67.5°	23.1	28.2	49.9	67.2	201.1	240.3	251.7	263.3	276.1	282.5	283.2
70°	21.1	26.9	46.1	59.6	175.5	209.5	219.1	231.3	241.5	244.8	246.7
72.5°	19.9	25.0	43.5	53.9	149.3	180.0	189.0	196.1	205.0	208.2	208.2
75°	18.0	22.4	41.0	48.0	122.3	147.4	155.0	162.1	169.1	170.4	168.5
77.5°	16.0	19.9	35.2	40.4	95.5	116.6	123.0	126.8	132.6	133.9	134.6
80°	13.5	17.3	27.5	31.4	69.2	85.9	90.3	93.5	98.7	98.7	100.0
82.5°	10.2	13.5	19.9	22.4	46.8	58.9	62.7	64.7	67.9	67.9	67.9
85°	6.4	8.3	12.8	14.7	28.2	35.9	38.5	39.1	41.6	42.3	42.3
87.5°	3.2	4.5	8.3	9.0	14.7	18.6	18.6	19.9	19.9	19.2	18.6
90°	2.0	3.5	5.2	5.5	8.7	12.9	15.0	13.3	9.9	7.4	7.4
92.5°	7.8	21.2	34.7	38.0	53.4	73.9	84.2	73.8	53.0	37.4	35.9
95°	18.9	43.4	67.9	74.0	131.4	207.9	246.2	219.6	166.6	126.9	122.4
97.5°	32.7	54.2	75.8	81.3	177.0	304.6	368.4	351.7	318.2	293.1	284.5
100°	43.3	62.8	82.5	87.4	193.6	335.2	406.1	407.3	409.8	411.6	401.4
102.5°	52.3	70.7	88.9	93.5	201.2	344.9	416.7	438.1	480.7	512.7	504.0
105°	67.7	83.2	98.7	102.6	206.9	346.0	415.5	463.4	559.1	630.9	626.2
107.5°	83.5	97.9	112.3	115.9	207.9	330.6	391.9	458.7	592.2	692.3	693.4
110°	94.1	107.1	120.1	123.4	206.4	317.0	372.3	446.8	596.1	708.0	712.9

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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	104.5	116.9	129.3	132.5	206.4	305.0	354.3	430.7	583.4	698.0	705.6
115°	120.2	131.7	143.2	146.0	208.3	291.3	332.8	406.4	553.5	663.9	674.3
117.5°	135.8	146.2	156.6	159.2	212.2	282.8	318.1	384.5	517.2	616.8	628.4
120°	144.9	154.7	164.5	166.9	215.4	279.9	312.2	372.8	494.2	585.2	596.5
122.5°	153.8	163.7	173.5	176.0	219.8	278.4	307.6	362.2	471.6	553.5	564.6
125°	167.3	176.3	185.3	187.6	226.0	277.1	302.7	349.1	442.0	511.6	521.8
127.5°	178.3	187.5	196.5	198.8	232.1	276.5	298.6	338.5	418.1	477.9	486.5
130°	184.2	194.1	203.8	206.3	236.6	276.9	297.0	332.5	403.5	456.7	464.6
132.5°	190.3	200.2	209.9	212.4	240.2	277.1	295.7	327.4	390.9	438.5	445.7
135°	199.4	208.3	217.3	219.5	244.1	276.9	293.3	319.8	373.0	412.9	419.1
137.5°	208.7	217.5	226.3	228.5	250.0	278.6	292.9	315.3	360.3	394.0	399.1
140°	216.3	224.4	232.6	234.6	253.6	278.9	291.5	310.9	349.8	378.9	383.6
142.5°	222.2	229.8	237.2	239.1	256.6	279.8	291.5	308.6	342.7	368.2	372.3
145°	231.3	237.8	244.4	246.0	260.5	279.9	289.6	303.5	331.4	352.3	355.4
147.5°	240.4	246.8	253.1	254.7	266.3	281.8	289.6	300.5	322.5	338.9	341.5
150°	246.2	251.9	257.8	259.2	269.3	282.8	289.6	298.8	317.3	331.3	333.4
152.5°	252.3	256.7	261.1	262.1	271.3	283.4	289.6	297.5	313.3	325.2	326.7
155°	261.4	264.6	267.9	268.6	275.6	284.9	289.6	295.9	308.5	317.9	319.0
157.5°	268.1	271.2	274.4	275.1	279.9	286.3	289.6	294.4	304.3	311.6	312.4
160°	272.7	275.0	277.5	278.1	281.9	287.0	289.6	293.8	302.2	308.5	308.8
162.5°	277.1	279.0	280.8	281.2	284.0	287.7	289.6	293.1	300.2	305.5	305.9
165°	282.1	283.7	285.4	285.8	287.1	288.7	289.6	292.0	297.1	300.9	301.3
167.5°	286.6	287.4	288.1	288.3	289.4	290.8	291.5	293.2	296.5	299.0	299.2
170°	289.6	290.3	291.1	291.3	291.4	291.5	291.5	293.2	296.5	299.0	299.0
172.5°	291.1	291.3	291.5	291.5	291.5	291.5	291.5	292.8	295.4	297.4	297.2
175°	293.3	293.3	293.3	293.3	292.7	291.8	291.5	292.3	294.0	295.3	295.3
177.5°	293.3	293.3	293.3	293.3	292.8	292.2	291.9	292.6	293.9	294.9	294.7
180°	293.3	293.3	293.3	293.3	293.3	293.3	293.3	293.3	293.3	293.3	293.3

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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	199.2	199.2
2.5°	212.7	211.4
5°	273.6	274.8
7.5°	368.3	367.8
10°	458.1	463.8
12.5°	523.4	524.7
15°	563.2	565.7
17.5°	578.5	579.2
20°	579.2	577.9
22.5°	572.1	570.8
25°	563.8	563.2
27.5°	556.1	556.8
30°	552.8	554.9
32.5°	552.8	556.1
35°	554.2	557.3
37.5°	553.5	557.3
40°	550.9	555.4
42.5°	544.0	547.1
45°	533.0	536.9
47.5°	518.9	521.5
50°	501.0	503.6
52.5°	478.6	479.2
55°	451.7	454.2
57.5°	422.9	423.4
60°	390.8	392.7
62.5°	356.9	356.9
65°	321.0	322.2
67.5°	283.8	287.0
70°	246.0	246.7
72.5°	208.9	208.9
75°	170.4	171.0
77.5°	133.9	133.9
80°	99.3	100.0
82.5°	68.6	69.8
85°	42.9	42.9
87.5°	19.9	18.0
90°	7.4	7.4
92.5°	30.0	24.0
95°	104.4	86.4
97.5°	250.2	215.9
100°	360.5	319.6
102.5°	469.0	434.0
105°	607.4	588.6
107.5°	697.9	702.5
110°	732.5	752.1

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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	735.6	765.7
115°	716.1	757.8
117.5°	674.7	721.0
120°	641.4	686.4
122.5°	609.0	653.3
125°	562.6	603.5
127.5°	521.0	555.4
130°	496.5	528.3
132.5°	474.2	502.7
135°	443.7	468.2
137.5°	419.1	439.3
140°	402.4	421.3
142.5°	388.5	404.7
145°	367.7	379.9
147.5°	351.6	361.8
150°	341.6	349.8
152.5°	332.9	339.1
155°	323.1	327.2
157.5°	315.2	318.1
160°	310.6	312.2
162.5°	307.5	309.0
165°	303.0	304.7
167.5°	299.9	300.5
170°	299.0	299.0
172.5°	296.6	296.0
175°	295.3	295.3
177.5°	294.0	293.3
180°	293.3	293.3

(END OF REPORT)