

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: P937502

Luminaire Tested: SQ4-FB-100U-050D-B40-1D-UNV-W2A-W-4

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P937502
REPORT IS A COMBINATION OF REPORTS P933565 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-100U-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

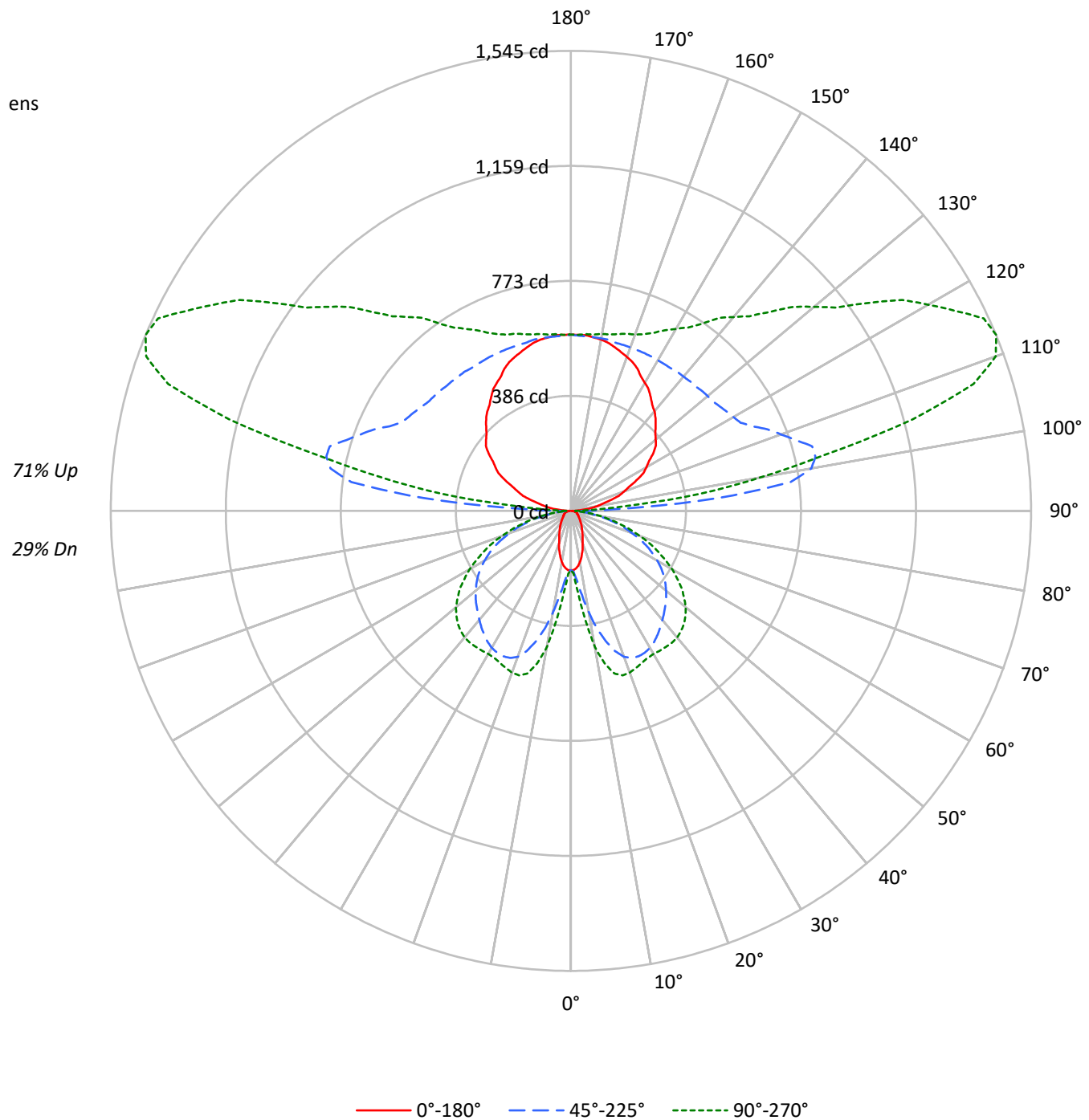
Lumens per Lamp: N/A
Luminaire Lumens: 5380.5 lumens
Efficiency: N/A
Efficacy: 130.6 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 41.2
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	102	102	102	102	91	91	91	91	71	71	71	53	53	53	37	37	37	37	37	29
1	93	88	84	81	83	79	76	73	62	60	58	46	45	44	32	31	30	30	30	23
2	84	77	71	66	75	69	64	59	54	50	47	40	38	36	28	26	25	25	25	19
3	76	67	60	54	68	60	54	49	47	43	39	35	32	30	24	22	21	21	21	16
4	70	59	51	45	62	53	46	41	42	37	33	31	28	25	21	19	18	18	18	13
5	64	52	44	38	57	47	40	35	37	32	28	28	24	21	19	17	15	15	15	11
6	58	47	39	33	52	42	35	30	33	28	24	25	21	18	17	15	13	13	13	10
7	54	42	34	28	48	38	31	26	30	25	21	22	19	16	15	13	11	11	11	8
8	50	38	30	25	44	34	27	23	27	22	18	20	17	14	14	12	10	10	10	7
9	46	34	27	22	41	31	24	20	24	20	16	18	15	12	13	11	9	9	9	7
10	43	31	24	19	38	28	22	18	22	18	14	17	14	11	12	10	8	8	8	6

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	0.5
10°-20°	114.2	2.1
20°-30°	199.8	3.7
30°-40°	257.2	4.8
40°-50°	287.3	5.3
50°-60°	275.2	5.1
60°-70°	218.1	4.1
70°-80°	128.2	2.4
80°-90°	37.9	0.7
90°-100°	288.5	5.4
100°-110°	758.5	14.1
110°-120°	786.5	14.6
120°-130°	630.8	11.7
130°-140°	495.0	9.2
140°-150°	379.9	7.1
150°-160°	273.6	5.1
160°-170°	167.4	3.1
170°-180°	56.6	1.1
0°-30°	339.8	6.3
0°-40°	597.0	11.1
0°-60°	1159.5	21.5
0°-90°	1543.6	28.7
90°-120°	1833.5	34.1
90°-150°	3339.2	62.1
90°-180°	3837.0	71.3
0°-180°	5380.5	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°	4	11	30	15	15	4
95°	38	149	497	256	174	42
105°	137	207	839	1273	1188	145
115°	243	295	672	1340	1529	240
125°	338	379	611	1032	1218	300
135°	402	443	592	833	945	311
145°	467	496	584	711	767	292
155°	528	542	584	642	660	242
165°	569	577	584	607	615	161
175°	592	592	588	596	596	56
180°	592	592	592	592	592	

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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°	4.0	7.2	10.3	11.1	17.5	26.0	30.2	26.8	20.2	15.1	15.1
92.5°	15.9	42.9	69.9	76.7	107.8	149.3	170.0	149.0	107.0	75.4	72.5
95°	38.1	87.6	137.0	149.4	265.2	419.6	496.9	443.4	336.4	256.2	247.2
97.5°	65.9	109.5	153.2	164.1	357.3	614.8	743.6	709.8	642.1	591.4	574.1
100°	87.4	126.9	166.5	176.4	390.8	676.6	819.5	822.0	826.8	830.6	809.9
102.5°	105.6	142.6	179.4	188.7	406.2	696.0	841.0	884.0	970.2	1034.7	1017.1
105°	136.7	167.9	199.1	206.9	417.5	698.2	838.6	935.1	1128.2	1273.1	1263.7
107.5°	168.5	197.6	226.7	234.0	419.6	667.1	790.8	925.6	1195.0	1397.1	1399.4
110°	189.9	216.2	242.5	249.1	416.4	639.6	751.1	901.7	1202.9	1428.8	1438.7

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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	211.0	236.0	261.0	267.3	416.6	615.5	715.0	869.1	1177.3	1408.5	1423.7
115°	242.7	265.8	288.9	294.7	420.4	588.0	671.7	820.2	1117.2	1339.9	1360.9
117.5°	274.1	295.1	316.1	321.4	428.2	570.7	642.0	775.9	1043.9	1244.9	1268.2
120°	292.3	312.1	331.9	336.8	434.5	564.9	630.0	752.4	997.3	1181.0	1203.7
122.5°	310.3	330.2	350.2	355.2	443.7	561.8	620.8	731.1	951.6	1117.0	1139.3
125°	337.7	355.8	374.0	378.6	456.0	559.2	610.9	704.6	891.9	1032.4	1053.0
127.5°	359.8	378.2	396.6	401.2	468.3	557.8	602.6	683.0	843.8	964.5	981.8
130°	371.8	391.6	411.3	416.3	477.3	558.8	599.5	671.1	814.2	921.6	937.6
132.5°	384.1	403.9	423.6	428.6	484.6	559.2	596.6	660.7	788.8	885.0	899.4
135°	402.4	420.4	438.4	442.9	492.6	558.8	591.9	645.6	752.8	833.3	845.7
137.5°	421.1	438.9	456.7	461.2	504.4	562.2	591.0	636.4	727.1	795.2	805.4
140°	436.5	453.0	469.4	473.5	511.8	562.8	588.3	627.4	705.8	764.7	774.1
142.5°	448.5	463.7	478.8	482.7	517.9	564.8	588.3	622.7	691.5	743.2	751.4
145°	466.7	480.0	493.2	496.5	525.8	564.9	584.4	612.5	668.8	711.0	717.2
147.5°	485.0	497.9	510.7	514.0	537.5	568.7	584.4	606.5	650.8	684.1	689.2
150°	496.9	508.5	520.2	523.1	543.6	570.8	584.4	603.1	640.4	668.5	672.6
152.5°	509.2	518.0	526.9	529.1	547.5	572.0	584.4	600.3	632.2	656.2	659.3
155°	527.5	534.0	540.6	542.2	556.3	575.0	584.4	597.1	622.5	641.5	643.6
157.5°	541.0	547.4	553.7	555.3	565.0	577.9	584.4	594.2	614.0	628.8	630.2
160°	550.2	555.1	560.0	561.3	569.0	579.2	584.4	592.9	609.8	622.5	623.3
162.5°	559.2	563.0	566.7	567.7	573.2	580.6	584.4	591.5	605.8	616.5	617.2
165°	569.2	572.5	575.9	576.7	579.3	582.6	584.4	589.5	599.7	607.4	608.2
167.5°	578.3	580.0	581.6	582.0	584.1	586.8	588.3	591.6	598.3	603.4	603.8
170°	584.4	585.9	587.5	587.9	588.0	588.2	588.3	591.6	598.3	603.4	603.4
172.5°	587.5	587.9	588.2	588.3	588.3	588.3	588.3	591.0	596.2	600.2	599.9
175°	591.9	591.9	591.9	591.9	590.7	589.0	588.3	590.0	593.3	595.8	595.8
177.5°	591.9	591.9	591.9	591.9	591.0	589.7	589.0	590.4	593.1	595.1	594.7
180°	591.9	591.9	591.9	591.9	591.9	591.9	591.9	591.9	591.9	591.9	591.9

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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°	15.1	15.1
92.5°	60.5	48.4
95°	210.8	174.4
97.5°	504.9	435.8
100°	727.5	645.1
102.5°	946.5	875.9
105°	1225.6	1187.7
107.5°	1408.5	1417.7
110°	1478.2	1517.8

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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	1484.5	1545.2
115°	1445.1	1529.3
117.5°	1361.6	1455.0
120°	1294.4	1385.1
122.5°	1228.9	1318.4
125°	1135.4	1217.9
127.5°	1051.5	1121.0
130°	1001.9	1066.2
132.5°	956.9	1014.5
135°	895.3	945.0
137.5°	846.0	886.6
140°	812.1	850.0
142.5°	784.1	816.7
145°	741.9	766.7
147.5°	709.7	730.1
150°	689.2	705.8
152.5°	671.8	684.4
155°	651.9	660.2
157.5°	636.1	642.0
160°	626.7	630.0
162.5°	620.5	623.6
165°	611.6	614.9
167.5°	605.1	606.5
170°	603.4	603.4
172.5°	598.7	597.4
175°	595.8	595.8
177.5°	593.3	591.9
180°	591.9	591.9

(END OF REPORT)