

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: P937503

Luminaire Tested: SQ4-FB-100U-050D-B40-1D-UNV-W2A-W-6

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P937503
REPORT IS A COMBINATION OF REPORTS P933573 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-6
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

Summary

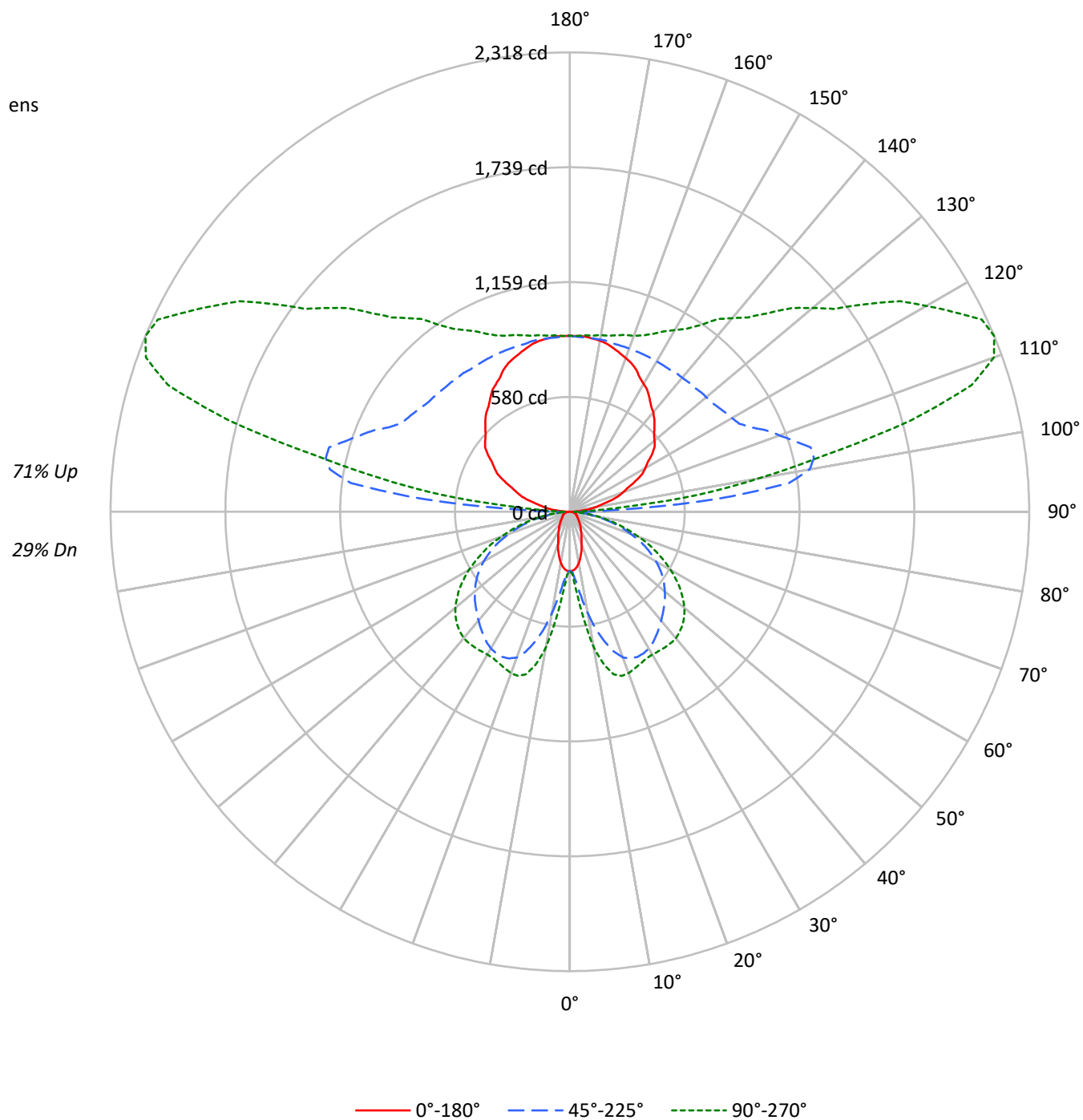
Lumens per Lamp: N/A
Luminaire Lumens: 8069.7 lumens
Efficiency: N/A
Efficacy: 130.6 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 6' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 61.8
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	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

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	38.6	0.5
10°-20°	171.3	2.1
20°-30°	299.6	3.7
30°-40°	385.6	4.8
40°-50°	430.7	5.3
50°-60°	412.6	5.1
60°-70°	327.0	4.1
70°-80°	192.3	2.4
80°-90°	56.8	0.7
90°-100°	432.8	5.4
100°-110°	1137.7	14.1
110°-120°	1179.7	14.6
120°-130°	946.3	11.7
130°-140°	742.5	9.2
140°-150°	569.9	7.1
150°-160°	410.4	5.1
160°-170°	251.1	3.1
170°-180°	84.8	1.1
0°-30°	509.5	6.3
0°-40°	895.1	11.1
0°-60°	1738.5	21.5
0°-90°	2314.5	28.7
90°-120°	2750.2	34.1
90°-150°	5008.9	62.1
90°-180°	5755.0	71.3
0°-180°	8069.7	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°	6	17	45	23	23	6
95°	57	224	745	384	262	64
105°	205	310	1258	1910	1782	217
115°	364	442	1008	2010	2294	360
125°	506	568	916	1549	1827	450
135°	604	664	888	1250	1418	467
145°	700	745	876	1066	1150	439
155°	791	813	876	962	990	364
165°	854	865	876	911	922	241
175°	888	888	882	894	894	84
180°	888	888	888	888	888	

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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°	5.9	10.7	15.5	16.7	26.3	39.0	45.3	40.2	30.2	22.6	22.6
92.5°	23.9	64.4	104.9	115.0	161.7	223.9	255.0	223.5	160.4	113.2	108.7
95°	57.2	131.3	205.5	224.0	397.9	629.5	745.4	665.2	504.6	384.3	370.6
97.5°	98.9	164.4	229.8	246.1	535.9	922.2	1115.4	1064.7	963.3	887.2	861.2
100°	131.1	190.4	249.7	264.5	586.1	1014.8	1229.2	1232.9	1240.4	1245.9	1215.0
102.5°	158.5	213.9	269.2	283.1	609.2	1044.0	1261.4	1326.0	1455.2	1552.2	1525.7
105°	204.9	251.8	298.7	310.5	626.3	1047.3	1257.8	1402.7	1692.4	1909.6	1895.4
107.5°	252.6	296.3	340.1	351.0	629.4	1000.6	1186.3	1388.4	1792.4	2095.6	2099.0
110°	284.8	324.2	363.8	373.6	624.7	959.4	1126.7	1352.6	1804.4	2143.2	2158.0

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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	316.4	354.0	391.6	401.0	624.9	923.3	1072.5	1303.7	1766.1	2112.8	2135.6
115°	364.0	398.7	433.4	442.1	630.6	881.8	1007.5	1230.2	1675.7	2009.8	2041.4
117.5°	411.1	442.6	474.2	482.0	642.2	856.0	962.8	1163.9	1565.8	1867.3	1902.4
120°	438.5	468.2	497.8	505.3	651.9	847.3	945.0	1128.6	1495.9	1771.4	1805.4
122.5°	465.4	495.3	525.2	532.7	665.5	842.7	931.3	1096.7	1427.4	1675.5	1709.1
125°	506.4	533.7	561.1	567.8	684.1	839.0	916.4	1056.9	1337.9	1548.6	1579.6
127.5°	539.9	567.4	595.0	601.8	702.5	836.8	903.9	1024.5	1265.8	1446.7	1472.8
130°	557.7	587.4	617.0	624.5	716.1	838.1	899.1	1006.5	1221.3	1382.4	1406.4
132.5°	576.2	605.9	635.5	642.9	726.9	839.0	894.9	991.1	1183.3	1327.5	1349.1
135°	603.6	630.6	657.6	664.4	738.9	838.1	887.8	968.3	1129.3	1250.1	1268.7
137.5°	631.5	658.3	685.1	691.8	756.7	843.4	886.6	954.7	1090.8	1192.9	1208.1
140°	654.8	679.5	704.1	710.2	767.6	844.1	882.4	941.2	1058.8	1147.0	1161.2
142.5°	672.7	695.5	718.3	724.0	776.8	847.2	882.4	934.1	1037.3	1114.8	1127.0
145°	700.1	720.0	739.8	744.8	788.7	847.3	876.5	918.7	1003.2	1066.5	1075.8
147.5°	727.5	746.8	766.1	771.0	806.1	853.0	876.5	909.7	976.2	1026.1	1033.7
150°	745.4	762.9	780.3	784.7	815.3	856.1	876.5	904.6	960.6	1002.8	1009.0
152.5°	763.9	777.2	790.4	793.7	821.3	858.1	876.5	900.5	948.4	984.3	989.0
155°	791.3	801.1	810.8	813.3	834.4	862.5	876.5	895.6	933.7	962.3	965.4
157.5°	811.6	821.1	830.6	833.0	847.5	866.9	876.5	891.3	921.0	943.3	945.4
160°	825.2	832.7	840.1	841.9	853.5	868.9	876.5	889.2	914.6	933.7	934.9
162.5°	839.0	844.5	850.0	851.5	859.8	871.0	876.5	887.2	908.7	924.7	925.9
165°	853.9	858.8	863.9	865.1	869.0	874.0	876.5	884.1	899.5	911.1	912.3
167.5°	867.5	869.9	872.3	872.9	876.0	880.3	882.4	887.5	897.5	905.1	905.6
170°	876.5	878.9	881.3	881.8	882.0	882.3	882.4	887.5	897.5	905.1	905.1
172.5°	881.3	881.8	882.3	882.4	882.4	882.4	882.4	886.4	894.4	900.3	899.8
175°	887.8	887.8	887.8	887.8	886.0	883.6	882.4	884.9	890.0	893.8	893.8
177.5°	887.8	887.8	887.8	887.8	886.4	884.6	883.7	885.7	889.6	892.5	892.0
180°	887.8	887.8	887.8	887.8	887.8	887.8	887.8	887.8	887.8	887.8	887.8

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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°	22.6	22.6
92.5°	90.6	72.7
95°	316.1	261.6
97.5°	757.4	653.6
100°	1091.3	967.6
102.5°	1419.7	1313.8
105°	1838.5	1781.6
107.5°	2112.8	2126.6
110°	2217.4	2276.7

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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	2226.7	2317.8
115°	2167.7	2294.0
117.5°	2042.5	2182.6
120°	1941.6	2077.7
122.5°	1843.3	1977.6
125°	1703.1	1826.8
127.5°	1577.2	1681.5
130°	1502.9	1599.2
132.5°	1435.5	1521.8
135°	1343.1	1417.5
137.5°	1269.0	1329.9
140°	1218.2	1275.1
142.5°	1176.1	1225.1
145°	1113.0	1150.0
147.5°	1064.4	1095.2
150°	1033.9	1058.8
152.5°	1007.8	1026.6
155°	977.8	990.2
157.5°	954.1	962.8
160°	940.0	945.0
162.5°	930.6	935.4
165°	917.4	922.3
167.5°	907.7	909.8
170°	905.1	905.1
172.5°	898.0	896.2
175°	893.8	893.8
177.5°	889.9	887.8
180°	887.8	887.8

(END OF REPORT)